CONSTRUCTION NEWS

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RAILWAYS.

(•Denotes that this work is advertised in Engineering News.)

Maryland.—Pennsylvania R. R.—It is reported that engineers of this company are surveying in Harford and Baltimore Counties for a change of line of the Philadelphia, Baltimore & Washington R. R., between a point about one miles north of Baltimore and about six miles south of Havre de Grace, in order to avoid the long trestle crossing over the Gunpowder and Bush Rivers. This will require about 20 miles of new construction. A. C. Shand, Philadelphia, Pa., is Ch. Engr.

West Virginia.—Press reports state that engineers will begin at once to select a route for a narrow gage railway from Webster Springs to the mouth of Valley Fork of the Elk River, distance of 22 miles.

North Carolina.—Southern Ry.—This company will soon ask for bids for the construction of a belt line at High Point, connecting the main line with the Asheboro Branch. W. H. Wells, Washington, D. C., is Ch. Engr.

Florida.—Louisville & Nashville R. R.—This company is negotiating with the city of Pensacola, to secure the right to construct a large switching yard and track privileges to reach the new Union Depot, which it proposes to build. W. H. Courtenay, Louisville, Ky., is Ch. Engr.

Kentucky.—Chesapeake & Ohio Ry.—It is reported that this company will let contracts for the construction of about 21 miles of a branch line on Beaver Creek, in Floyd and Knott Counties, about March 1. There will be about 500,000 cu. yds. of excavation work and about 3,500 cu. yds. of concrete masonry. F. I. Cabell, Richmond, Va., is Ch. Engr.

Missouri.—See item under Miscellaneous Contracts, Railroad Grade, Poplar Bluff, Mo.

Texas.—Forth Worth & Southwestern Ry.—This company has been chartered to construct an 18 mile line between Glen Rose, Walnut Springs and Fort Worth. W. D. Morton, Glen Rose, is an incorporator.

Oklahoma.—Missouri, Oklahoma & Gulf R. R.—This company has been granted a charter in Oklahoma for the construction of a line from Oklahoma City through Oklahoma, Lincoln, Pottawatomie, Seminole, thence south through Johnson and Bryan counties to the Texas line, from where it will run to a point on the Gulf of Mexico. The estimated length of the line is 1,-00 miles. William Kennetick, 618 Bryant Bldg., Kansas City, Mo., is a director. Noted Sept. 21.

Utah.—Utah & Grand Canyon Ry. — It is reported that this company will soon construct 500 miles of line throughout Utah. Plans now call for the construction from Luna to Cedar City, but it will be extended further later. F. A. Dudley, Niagara Falls, N. Y., is Pres.

California.—Atchison, Topeka & Santa Fe R. R.—It is reported that a four-mile branch will be built from the middle of the San Luis Rey River, near Oceanside, into the San Luis Valley. J. C. Phillips, Los Angeles, is Ch. Engr.

Canada.—Transcontinental Ry. — See item under Miscellaneous Contracts: Steel Rails, Etc., Ottawa, Ont.

Quebec.—Roberval-Saguenay Ry.—It is reported that this company will soon construct a line from Mathias Junction, to Roberval, a distance of 125 miles. J. F. Grenon, Chicoutini, is Ch. Engr.

Saskatchewan.—Hudson Bay Ry. — It is reported that this company will extend its line westward from La Pas to Saskatoon.

Mexico.—The federal government has granted a concession to Guillermo Flor for the construction of a railroad from San Bartolo, on the National Rys. of Mexico, in the state of Colima, to Las Salinas.

Mexico. — The Government Department of Communications has received bids for the construction of a railroad from Balsas, which is the present terminus of the Cuernavaca division of the National Rys. of Mexico, to the port of Zehuatanejo on the Pacific coast. A branch line will also be constructed to Uruapan, where it will make another connection with the National Rys. of Mexico. The bidders on the construction contract were the National Rys., of Mexico, represented by Salvador M. Cacino; Compania Constructora de Funk, represented by Seraplo Randon, and Compania Mexicana del Pacifico, represented by Gabriel Robles Dominguez. The proposed work involves the construction of about 350 miles of track. The figures of the different bids have not been made public. It is reported that the government will also take steps to improve the harbor at Zehuatanejo.

ELECTRIC RAILWAYS.

(✚Denotes a contract awarded.)

Matteawan, N. Y.—The Mount Beacon Incline Ry. Co. will build two miles of line and a new trestle in the spring, it is stated. E. S. Whitney, Matteawan, is Pres. and Gen. Mgr.

Ossining, N. Y.—The Public Service Commission has approved the application of the Hudson River & Eastern Traction Co. to extend its line from Ossining to White Plains. Francis A. Stratton, Mount Vernon, N. Y., is Pres.

Teaneck (Englewood post-office), **N. J.**—An extension through Teaneck is projected by the Public Service Ry. Co. A franchise has been secured to build through Ridgefield Park and the company will ask for a franchise in Bogota. Martin Schreiber, Public Service Bldg., Newark, is Engr., Maintenance of Way.

Jersey City, N. J.—The Public Service Ry. Co. has been granted permission by the Public Utilities Commission, to build connecting links between its lines on Henderson, Grand, Montgomery Sts., and Newark Ave.; also to lay tracks on Henderson St., east of Gregory St. R. E. Danforth, Public Service Bldg., Newark, N. J., is Gen. Mgr.

Bloomsburg, Pa.—Press reports state that within a few weeks contracts for the construction of nine miles of track and several bridges will be let by the Bloomburg, Millville & Northern Ry. Co. C. W. Miller, Bloomsburg, is Pres.

Snow Shoe, Pa.—The Snow Shoe Electric & Street Ry. Co. has been chartered to build a 2-mile railway connecting Snow Shoe and Clarence. J. M. Shearer is Pres.

Bluefield, W. Va.—It is reported that B. M. Cohen and others are considering plans to build about ten miles of railway between Bluefield and Princeton, W. Va.

Morgantown, W. Va.—The South Morgantown Traction Co. has been granted a franchise to lay tracks on several streets in the second ward. S. B. Hartley is City Engr., and will be in charge of the work.

Weston, W. Va.—A franchise has been granted to the Clarksburg & Weston Electric Ry. Co., of Clarksburg, to extend its line. Noted Dec. 7.

Goldsboro, N. C.—A charter has been granted to the Goldsboro, Seven Springs & Swansboro R. R. Co. to build and operate a railway from Goldsboro to Swansboro, about 70 miles. The incorporators include R. C. Griffin and William A. Robertson.

Spartanburg, S. C.—Surveys are being made by the Spartanburg Ry., Gas & Electric Co., for an extension in Spartanburg. R. C. Crawford, Pittsburgh, is Pres.

Jacksonville, Fla.—The Jacksonville Electric Co., will double-track its Riverside line on St. Johns Ave. An extension of the Hogan St. line to Enterprise St. is under consideration. Hardy Croom, Jacksonville, is Local Mgr., and Pur. Agt.

Birmingham, Ala.—It is stated two miles of track will be laid by the Birmingham & Edgewood Electric Ry. Co. R. L. Totten, 2014 First Ave., this city, is Ch. Engr.

✚Berwick, La. — The Southwestern Traction & Power Co., of New Orleans, has awarded a contract to the CHAPMAN CONSTRUCTION CO. for the construction of a line from Berwick to Lafayette, by way of Jeanerette and New Iberia, about 60 miles.

Louisville, Ky.—The Louisville & Interurban Ry. Co., has applied to the Council for franchise to build an extension of about one mile. T. J. Minary, 316 West Jefferson St., Louisville, is Pres. and Gen. Mgr.

Lima, Ohio.—A franchise has been granted to the Ohio Electric Ry. Co. for an extension of its line on Fourth St. W. Kesley Schoepf is Pres.

Poland, Ohio.—George E. Rose has secured a franchise to establish a trolley line in Poland continuing to Youngstown.

Evansville, Ind.—The Evansville & Southern Indiana Traction Co., contemplates the construction of a railway on Bell St., from Eighth St. to Kentucky Ave. F. M. Durbin, 324 Upper Second St., Evansville, is Gen. Mgr.

Vincennes, Ind. — The Vincennes, Washington & Eastern Traction Co. has secured sufficient capital to construct its proposed railway connecting Vincennes, Washington and Loogootee, 33 miles.

Manistee, Mich.—A company is being organized to build a railway from Muskegon to Manistee by way of Fremont, Hesperion and Ludington. Herman O'Connor of Holton, is Chn. of the organizing committee.

East St. Louis, Ill.—Press reports state that surveys are being made by the Springfield & Central Illinois Traction Co. for a railway from East St. Louis to Oscaloosa, about 80 miles. The East Saint Louis Engineering Co., Cahakia Bldg., this city, is in charge of the work.

Springfield, Ill.—The Springfield Consolidated Ry. Co. contemplates double-tracking its line on South Eighth St., from Monroe St. to South Grand Ave. W. L. Wilson, 331 South Fifth St., is Ch. Engr.

Racine, Wis.—The Milwaukee Light, Heat & Traction Co., has made application for franchises to build and operate lines on Grand and Asylum Aves., and North and Clair Sts. in Racine.

Iowa City, Iowa.—The Iowa City, Ottumwa & Southwestern Electric Ry. Co., has secured the necessary capital to begin the construction of its proposed railway to connect Iowa City, Ottumwa, Sharon Center and Keota, about 70 miles. Frank Tanner, Iowa City, is Gen. Mgr.

Dallas, Tex.—It has been announced by R. M. Nunelly of Jacksonville, Tex., Vice-Pres., of the Trinity Valley Traction Co., that plans for the construction of an interurban railway from Dallas to Palestine, about 100 miles, are well advanced and grading will be started within a few weeks.

Sapulpa, Okla.— Announcement has been made, it is reported that a New York syndicate had purchased the Sapulpa Interurban Ry. Co., and will soon begin the construction of an interurban line connecting Sapulpa, Okmulgee, Tulsa and Muskogee.

Woodward, Okla. — Final surveys have been made by the Oklahoma & Northwestern Ry. Co., Oklahoma City, for its 74-mile railway from Woodward to Watonga. E. A. Wagener, Oklahoma City, is Pres.

Boise, Idaho.—The Boise Valley Ry. Co. has received a franchise for an extension of its line from Ninth St. over a proposed bridge to connect with its line in South Boise. The company is planning to build the bridge over the Boise River at Ninth St. W. F. Almond, 808 Bannock St., Boise, is Ch. Engr.

Nampa, Idaho.—A franchise has been granted to William Mainland and others, for the construction of a railway on the principal streets of Nampa.

Seattle, Wash.—The Seattle Electric Co. is planning to double track its Alki Point line in this city. George P. James, Seventh and Olive Sts., Seattle, is Ch. Engr.

Ashland, Ore.—The Oregon & Southern Ry. Co., of Seattle, Wash., has made surveys and secured franchises and right-of-way for its projected 155-mile railway to connect Sama Valley, Gold Ray, Rock Point, Ruch, Talent, Medford, Jacksonville, Grant's Pass, Port Orchard, Wash., and Ashland, Ore. A bond issue will be made. J. Arnold Doyle, Medford, is Pres.

Richmond, Cal.—The East Shore & Suburban Ry. Co. will begin double tracking its line through Richmond to the Standard Oil Works, according to reports.

San Jose, Cal.—Plans are being made by the Peninsular Ry. Co., for a new line to Alum Rock Park. F. V. McPeak, 143 South Market St., San Jose, is Ch. Engr.

Willows, Cal.—The Board of Supervisors has passed an ordinance granting a franchise, to build and operate a railway in Glenn County, to E. L. Sisson, H. W. Manor, J. Reitn, Jr., and L. P. Klemmer.

Marysville, Cal.—Contracts for grading will soon be let by the Marysville-Colusa Ry. Co., of San Francisco for a line to connect Marysville, Meridan, Sutter City and Colusa. Samuel Lelienthal of San Francisco, is interested.

✚Woodland, Cal.—A contract has been awarded to GUY McMURTY, Yuba City, by the Vallejo & Northern Ry. Co., for the construction of half a mile of new bed. This is a part of the Woodland-Sacramento branch.

Berlin, Ont.—The Berlin & Waterloo Street Ry. Co. will award contracts for the construction of a ½-mile of new track and two switches. John Card, 56 King St., West Berlin, is Road Master.

LIGHT AND POWER PLANTS.

(•Denotes that this work is advertised in Engineering News.)

Portland, Me.—The construction of a substation on Hooper St. is contemplated by the Portland Light & Power Co. The building will cost approximately $40,000, and the equipment $60,000.

Foxboro, Mass.—The purchase of a 250 or 300-HP. boiler is contemplated by the Norfolk & Bristol Street Ry. Co.

Rochester, N. Y.—Plans have been completed for the erection of a transmission line from the line owned by the Rochester Ry. & Lighting Co. to the Iola Sanatorium. The line will be about three miles long.

New York, N. Y.—Bids were received on Dec. 22, by James Knox Taylor, Superv. Arch., Treasurer Dept., Washington, D. C., for wiring and lighting fixtures at the New York post office, as follows: Maintenance Co., New York, $21,534; Commercial Construction Co., New York, $21,321; McLeod, Ward & Co., New York, $24,906; New York Construction Co., New York, $27,000; Lapointe Electric Co., Hoboken, N. J., $24,000; S. Frederick Jackson, Inc., New York, $20,480. Noted Dec. 14.

Bids will be received by H. S. Thompson, Comr. of Water Supply, Gas &

PROPOSED CANAL WORK IN NEW YORK STATE.

The work of preparing plans and specifications of work to be placed under contract during 1912, in connection with the improvement of the State canals, is proceeding rapidly under the direction of John A. Bensel, State Engineer. Those contracts, plans for which are nearest completion and which will probably be advertised early in the year, include the following:

Bridge contracts: Contract No. 101, for the construction of a steel highway bridge superstructure at Three River Point; Contract No. 84, for the construction of two steel lift bridges at Clyde; Contract No. 89, for the construction of steel highway bridge superstructures at Main Ave. and East Ave. in Newark, Albertons, Peaks, near Lock No. 28-B and Limerick; Contract No. 105, for the construction of five lift-bridges between Rochester and Lockport.

Other work embraces the dredging of the Mohawk River from the Hudson River to Contract No. 2-E; Contract No. 18-A, for completing the construction of the canal from Mindenville to Castle Creek; Contract No. 57, for the construction of a harbor at Syracuse; Contract No. 59, for constructing a movable dam in the Genessee River at Rochester; Contract No. 65, for constructing the canal in Orleans County, including some structure to provide for the Oak Orchard Creek crossing; Contract No. 56, for improvement of the Glens Falls feeder; Contract No. 10-B, for completing the construction of Oswego Canal at Fulton; Contract U, for constructing Lock No. 2 and Dam No. 2 near Demonts Bridge, Cayuga and Seneca Canal; Contract D, for constructing Lock No. 3 and excavating the canal prism east of Seneca Falls; Contract E, for constructing Lock No. 4 at Seneca Falls, three highway bridges, etc.; Contract F, for the construction of Lock No. 5 and dam at Waterloo; Contract G, for dredging a channel in the Seneca River from Lock No. 4 at Seneca Falls to Waterloo; Contract No. 92, for constructing hydroelectric power plans and equipment for operating and lighting Locks Nos. 2, 3, 4, 5, 6 and 7 on the Erie Canal and Locks Nos. 6 and 8 on the Champlain Canal.

Electricity, until 2 p. m., Dec. 29, for furnishing, putting in place and maintaining 660 gas regulators, from Jan. 1, 1912, to Dec. 31, 1912, and for furnishing gas regulators in public buildings in the Boroughs of Manhattan and the Bronx; and for furnishing steam heat for heating or power purposes to certain public buildings from Jan. 1, 1912, to Dec. 31, 1912; and for furnishing steam to public buildings in the Boroughs of Manhattan and the Bronx.

Bids will be received by the Department of Public Charities, until 2.30 p. m., Jan. 2, for furnishing all the labor and materials required for underground conduit system, transformer vault, electric elevator and other work in the Metropolitan Hospital district; and for complete electric wiring and fixtures for Wards T and S, male dormitory, female tuberculosis building, and sun tents, solarium, pavilion Nos. 1 to 6, superintendent's residence, carpenter shop, coffin shop, stable, power house and laundry building for Metropolitan Hospital district; and for complete electric wiring and fixtures for new Roman Catholic Church, male infirmary and sun tents, and electric motors for laundry for Metropolitan Hospital district; and for furnishing labor for ground wire and labor and materials for grounding system, lightning arresters and automatic switchs for Metropolitan Hospital district. Michael J. Drummond is Comr.

Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., until 3 p. m., Jan. 2, for installing electric equipment in new Public School 40, at Pacific and Union Hall Sts., Jamaica, Borough of Queens.

Bids will be received by H. S. Thompson, Comr. of Water Supply, Gas and Electricity, until 2 p. m., Jan. 3, for furnishing, delivering and installing a steam heating system in engine room, storage house, etc., at the 179th St. pumping station.

Hoboken, N. J.—The Board of Education is considering the establishment of a power plant to supply electricity for lamps and motors for the schools throughout the city. The estimated cost is $25,000. Wilson Taylor is Pres. of Bd.

Finderne, N. J.—The H. W. Johns-Manville Co., 100 William St., New York, will build a power plant in connection with its manufacturing plant at Finderne. The estimated cost is $200,000.

***Long Branch, N. J.**—Bids will be received by the Board of Education until noon, Dec. 29, for installing an electric clock and bell system in a school building at Long Branch. John T. Britton is Secy. of Bd.

Altoona, Pa.—The Altoona & Logan Valley Electric Ry. Co. will build an addition to its power plant at Fifth Ave. and 32d St. in the near future. James Honor is Ch. Engr. of Power Station.

Morgantown, W. Va.—J. S. Kuhn and W. S. Kuhn, 345 Fourth Ave., Pittsburgh, Pa., will erect the dams on Cheat River for power purposes. The cost is estimated at $1,000,000.

✚Hutchison, W. Va.—A contract for the installation of three 1,000-KW. gas engines, in connection with the power plant to be erected by the Consolidated Coal Co., Baltimore, Md., has been awarded to the BETHLEHEM STEEL CO., South Bethlehem, Pa. The estimated cost of the plant complete is $300,000.

Millville, W. Va.—Plans are being prepared for the erection of a high-tension transmission line from the electric plant of the Winchester & Washington City Ry. Co., at Millville, to Brunswick, Md. D. M. Swink, Millville, is Gen. Mgr.

✚Sisterville, W. Va.—Ralph Broadwater, Pres., Sisterville Electric Light & Power Co., awarded contract to McCLINTIC-MARSHALL CONSTRUCTION CO., Rankin Station, P. O., Bradford, Pa., to erect steel building for power plant, 2,000-HP. capacity. The estimated cost is $95,000.

Maiden, N. C.—The installation of an electric lighting system in Maiden, is contemplated by the Council.

Wentworth, N. C.—Bids will soon be received by the Commissioners of Rockingham County for furnishing an electric light plant for the court house. J. P. McMichael, Wentworth, is Clk. of Comrs.

Douglas, Ga.—See item under Water Supply—Irrigation.

Macon, Ga.—The Council is considering the installation of electrical equipment to operate the water-works pumping station.

Washington, Ga.—All bids for the construction of the electric light plant have been rejected by the city. New bids will be received by Boyce Ficklen, Jr., City Clk., until Jan. 22. Noted Nov. 9 and Dec. 14.

Fort Pierce, Fla.—The city has voted a bond issue of $90,000 for public improvements, including the installation of an electric light plant.

Jacksonville, Fla.—Bids will be received by W. M. Bostwick, Jr., Chn. Bd. of Bond Trus., until Jan. 4, for furnishing the following: Electric-conduit wiring and fixtures for the new power station, wiring and fixtures for the old power station. Plans are on file at the office of the Board or the Scofield Engineering Co., Philadelphia, Pa.

Richton, Miss.—The construction of a power-house is contemplated by the Richton Light & Power Co. S. E. Shannon is Supt.

Lafayette, La.—The city is contemplating the improvement and extension of the municipal electric-light plant and water-works system. The estimated cost is $50,000.

Rayville, La.—Plans are being prepared by W. H. Wright, for an electric light plant to be built by the city.

Jackson, Tenn.—The Citizens' Gas Light Co. is considering plans for improvements to its plant and lighting system. About $20,000 will be expended by the company.

Falmouth, Ky.—Anderson & Frankel, Engrs., Lexington, have been retained to take charge of the engineering work in connection with the municipal electric light plant. A bond issue of $75,000 has been voted. N. C. Ridgeway is Mayor. Noted Nov. 23.

Uniontown, Ky.—The Home Lighting Co. is contemplating improvements to its electric light plant. A new building will be built and two 125-HP. boilers will be installed. G. W. Clements is Mgr.

Whitesburg, Ky.—Plans are being prepared by D. C. Mulling & Son, Partridge, for the construction of an electric light and power plant.

Island, Ky.—The installation of an electric street-lighting system is contemplated by the town. The electricity for operating the system will be secured from the plant of the Memphis Mining Co.

Covington, Ohio.—The Buckeye Light & Power Co. has been incorporated to build and operate gas and electric plants to furnish current for light and power. The incorporators are J. H. Marlin, Hugh C. Marlin, A. W. Landis, John Weaver and John Fenemore.

Greenville, Ohio. — Bids will be received by D. W. Shively, Dir. Pub. Ser., until Dec. 30, for furnishing electric street lamps, and gas lamps to the city for a term of eight years.

Anderson, Ind.—Plans are being prepared by the City Engineer for the installation of a lighting system in the business district of Anderson.

Grand Rapids, Mich.—The construction of a power plant in the factory district of Grand Rapids is contemplated by J. W. Spooner, Grand Rapids, and associates. The plant will have a capacity of 1,000 HP.

Bids will be received by the Board of Public Works until Jan. 25 for a 350 to 375-HP. water-tube boiler for the municipal lighting plant. Samuel A. Freshney is Secy. of Bd.

Champaign, Ill.—The city has voted a bond issue of $35,000 for the installation of a street lighting system of incandescent lamps.

Corydon, Iowa.—Bids will be received by J. C. Bower, Town Clk, until 3 p. m., Jan. 9 for improvements to the electric-light system.

Clara City, Minn.—A franchise has been granted to Charles Bush and E. Behrends for the installation of an electric-light plant in Clara City.

Waterville, Minn.—A franchise has been granted to the Consumers' Power Co. to construct and operate an electric-light plant in Waterville.

McCune, Kan.—The citizens are considering the installation of an electric-light plant.

Hillsboro, Kan.—The installation of an electric light system is contemplated by the town. Electricity will be secured from the municipal electric plant at McPherson.

Perry, Kan.—A bond issue of $5,000 has been voted for the installation of a municipal electric light plant.

Waterville, Kan. — See item under Water Supply—Irrigation.

Norfolk, Neb.—Plans are being prepared by Worley & Black, Engrs., Kansas City, Mo., for the installation of an electric light plant in Norfolk. The estimated cost is $75,000.

Elk City, Neb.—The Nebraska Transportation Co., Omaha, is considering the construction of a power plant at Elk City. The output of the proposed plant will be 21,000 HP.

Devils Lake, N. Dak.—The city is considering the installation of an electric lighting system. The estimated cost is $33,000. August Raff is City Engr.

Milton, N. Dak.—The city is considering the installation of an electric street lighting system.

Calvert, Tex. — A 50-year franchise has been granted by the City Council to the Calvert Water, Ice & Electric Co. The company will make extensive improvements to its light and water systems.

Seadrift, Tex.—G. W. Huff, Corpus Christi, will install an electric light plant.

✚Carlsbad, N. Mex.—A contract for the construction of a concrete power dam across the Pecos River at Carlsbad, has been awarded to the PIERSON ENGINEERING & CONSTRUCTION CO., Hartford, Conn.

Boise, Idaho.—See item under Water Supply—Irrigation.

Fallon, Nev.—The Secretary of the Interior has authorized the Reclamation Service to purchase copper wire in the amount not to exceed $6,000 for use in the transmission line from Lahontan to Fallon.

Spokane, Wash.—Plans for the installation of a 500-KW. motor-generator set, are being considered by the Spokane & Inland Empire R. R. Co. R. C. Bowdish is Supt.

Vancouver, Wash.—A 50-year franchise has been granted to the Washington-Oregon Corporation to furnish light and power to Adna and Littell. W. B. Forshay, Vancouver, is Mgr.

Washougal, Wash.—An ordinance has been passed by the City Council granting the Northwestern Electric Co. the right to build and maintain an electric light and power system in Washougal.

Dallas, Ore.—A franchise has been granted to the Pacific Power & Light Co., Portland, to erect and maintain an electric light and power system at Dallas.

McMinnville, Ore.—The city has voted a bond issue of $75,000 for improvements. About $30,000 will be expended for light and water, $15,000 for water mains, and $30,000 for general street improvements.

Alameda, Cal.—Bids will be received by the Clerk of the City Council until 8 p. m., Jan. 2, for furnishing electrical equipment to the Department of Electricity as follows: 40,000 ft. of No. 10 duplex rubber-covered wire in 1,000-ft. coils; 1,100 ft. 3-in. black gas pipe; 40,000 ft. ¾ black enameled rigid conduit; 2,000 ft. 3½-in. black gas pipe; 275 3x3½ malleable black beaded reducers. F. F. Browning is Clk.

Half Moon Bay, Cal.—The citizens of Half Moon Bay are considering the installation of a street lighting system. Joseph H. Nash is Clk.

Roseville, Cal.—Bids will be received by the President of the Board of Trustees until 7.30 p. m., Jan. 8, for furnishing and supplying electric energy to the city for five years. The required energy will be 3-phase, 60-cycle at about 2,300 volts. J. H. Stineman is Clk. of Bd.

Tropico, Cal.—The citizens of Tropico are considering the construction of a municipal electric light and power plant. The estimated cost is $20,000.

Los Angeles, Cal.—Bids will be received by the Board of Supervisors until 2 p. m., Jan. 15, for furnishing and installing a high-pressure steam line connecting the County Hospital with the Detention Home.

San Francisco, Cal.—The Northern Power & Water Co. has been incorporated by F. E. Boland, C. W Willard, H. L. Atkinson, J. B. McKeen, T. A. Allen, J. F. Cassell, P. I. Muller and A. C. Greene, all of San Francisco, and S. J. Langmaid, of Berkeley. It is organized for fifty years for the purpose of dealing in power and water.

San Francisco, Cal.—The California-Oregon Power Co. have been incorporated for the purpose of supplying electricity and gas to individuals, firms or cities for developing heat and power rights. The directors are Edward Hohfeld, Alameda, A. L. Whittle, Mill Valley, J. H. Sherman, Oakland, F. B. Lorrigan and Edwin Echwab, San Francisco.

San Jose, Cal. — The Sierra & San Francisco Power Co. will build a branch line into San Jose from the nearest point on their line, a distance of about 10 miles. John A. Britton, 445 Sutter St., San Francisco, is Mgr.

Watsonville, Cal.—The Board of City Trustees have approved plans for the installation of a street lighting system. The Watsonville Light & Water Co., controlled by the Coast Counties Light & Power Co., will install about 350 arc lamps, Mazda type. John Martin, Alaska Commercial Bldg., San Francisco, is Pres.

BRIDGES.

(✚*Denotes a contract awarded.*)

Providence, R. I.—The city is considering the construction of a bridge over Providence River, between the Weybosset and Burnside bridges. Estimated cost, $60,000. Otis F. Clapp is City Engr.

***Fulton, N. Y.**—We are officially advised that bids for constructing a reinforced concrete arch bridge over the Oswego River at Broadway were received by the Board of Public Works Dec. 18, as follows: (a) Total: (b) paving; (c) concrete; (d) reduction, if awarded state contract: Pratt & Phillip, Massena, N. Y., (a) $143,621, (c) $10.00 per cu. yd.; Owego Bridge Co., Owego, N. Y., (a) $130,000, (b) $1.60 per sq. yd., (c) $7 (d) $1: L. B. Cleveland, Cleveland Bldg., Watertown, N. Y., (a) $125,785, (b) $2, (c) $6.50, (d) $12,000; S. Pearson & Son, Inc., 507 Fifth Ave., New York, (a) $157,028, (b) $2.80, (c) $10; Holton D. Robinson, 357 West 121st St., New York, (a) $155,700, (b) $2.50, (c) $6; H. E. Fox, 31 East 125th St., New York, (a) $134,000, (b) $2.40, (c) $8, (d) $1; McHarg, Barton & Co., 165 Broadway, New York, (a) $153,700, (b) $2.40, (c) $5.20, (d) $1,000; T. A. Gillispie Co., 50 Church St., New York, (a) $144,000, (b) $12.20, (c) $9, (d) $1,000. This is the city's portion of Barge Canal Contract No. 104. Plans for the bridge were prepared by the Concrete Steel Engineering Co., Park Row Bldg., New York. Noted Dec. 7.

Bids for the portion of the work to be done by the state were received Dec. 20 by Charles E. Treman, Supt. Pub. Wks., Albany, as follows: Pratt & Phillips, Messina, N. Y., $143,621; T. A. Gillespie Co., 50 Church St., New York, $144,000; McHarg, Barton & Co., 165 Broadway, New York, $153,700; Holton D. Robinson, 357 West 121st St., New York, $155,700; S. Pearson & Son, 507 Fifth Ave., New York, $187,028. These bids were exclusive of the bridge pavement. The bridge to be constructed by the state at Fulton under Contract No. 104 is to [illegible] in connection with a similar structure over the Oswego River to be erected by the city of Fulton, the two bridges to be so erected as to form one continuous structure.

Bloomsburg, Pa.—See [illegible] under Electric Railways.

Pawling, Pa.—The Commissioners of Chester and Montgomery Counties have decided to build a 3-span girder bridge over the Schuylkill River, between Pawling. Estimated cost, $30,000. Noted Dec. 7.

***Bristol, Pa.**—See item under "Proposals."

Norfolk, Va.—Plans have been prepared by W. T. Brooke, City Engr., for a bridge to be erected between old Norfolk and the Eighth Ward. The bridge will be of steel, [illegible] concrete piers, and will have a draw span. Estimated cost, $450,000.

Salisbury, N. C.—Bids will soon be asked by the Commissioners of Rowan and Davie Counties for constructing a bridge across South River. The bridge will be 450 ft. long, and from 12 to 16 ft. wide. Estimated cost, $6,000. C. E. Miller, Salisbury, is Engr.

Jacksonville, Fla.—Bids will be received until Dec. 29, by the Board of Commissioners of Duval County, for the construction of a bridge over McGirts Creek on the road leading from New York Ave. to the old Orange Park. Plans and specifications are on file with Gail L. Barnard, County Engr.

Canton, Ohio.—The Commissioners of Stark County have ordered plans prepared for a bridge over Nimishillen Creek at Navarre St.

Columbus, Ohio.—The City Council is considering a bond issue of $35,000 for constructing a bridge at Inka and Indianola Aves. Henry Maetzel is City Engr.

Dayton, Ohio.—The City Council has authorized a bond issue of $15,000 for constructing a bridge across the canal at Stewart St. F. J. Cellarius is City Engr.

Dayton, Ohio.—Bids will be received until noon, Dec. 30, by the Department of Public Service, J. C. Ely, Dir., for constructing the substructure and reinforcing the steel superstructure of a bridge across the Hydraulic Race at Sperling Ave., in accordance with the plans and specifications on file in the office of the City Engineer.

✚Lima, Ohio.—The contract for constructing a bridge in Woodlawn Cemetery has been awarded to the LIMA CUT STONE CO., at $6,720. The bridge will be built of Bedford limestone and Vermont granite. Noted Dec. 21.

✚Massillon, Ohio.—The contract for constructing a Strauss trunion bascule lift bridge over the Ohio Canal at West Main St., Massillon, was awarded by the Board of Commissioners of Stark County, Dec. 15, to the MASSILLON BRIDGE & STRUCTURAL CO., at $9,930. The only other bid received was submitted by the Wyncoop-McGormley Co., Toledo, Ohio, at $15,000. The engineer's estimate was $10,000. Noted Nov. 30.

Huron, Ohio.—Bids will be received until 1.30 p. m., Jan. 15, by the Board of Commissioners of Erie County, at Sandusky, for the construction of a system of pile bents for the reinforcement of the east and west approaches of the Huron River Bridge, No. H110, over the Huron River at Huron. Plans, specifications, descriptions and bills of material may be seen at the office of the County Surveyor, at Sandusky. John Derst is County Audr.

Richmond, Ind.—The Commissioners of Wayne County have decided to construct a bridge across White Water River at South L St. Estimated cost, $60,000. John Mueller is County Bridge Engr. Noted Dec. 21.

Vassar, Mich.—We are officially advised that a bridge will be erected over Cass River at Vassar. Estimated cost, $10,000. Harry Dean is Town Clk. Noted Dec. 14.

Saginaw, Mich.—The Board of Supervisors of Saginaw County are considering the construction of a 180-ft. span bridge, 20 ft. wide, over Swan Creek on the Gratiot Road. Estimated cost, $10,000.

Waukegan, Ill.—The Board of City Commissioners have adopted a resolution authorizing the construction of a bridge over the ravine at Genesee St. The bridge is to be 82 ft. wide, of concrete construction, and is estimated to cost $74,000. M. J. Douthitt is City Engr. Noted Nov. 23.

✚Atkinson, Ill.—We are officially advised that contracts for constructing a 140-ft. steel viaduct with concrete floor and abutments on the highway between Atkinson and Alba, were awarded Dec. 21, as follows: Superstructure to the JOLIET BRIDGE & IRON CO., Joliet, Ill.; substructure to JOSEPH KLEIN, Freeburg, Ill. Total cost, $5,170. Noted Dec. 21.

✚Wichita, Kan.—Contracts for bridge work have been awarded by the Board of Commissioners of Sedgwick County as follows: To the MISSOURI VALLEY BRIDGE & IRON CO., Leavenworth, Kan., for constructing a steel and concrete bridge over Chisholm Creek, in Kechi Township, at $1,860; to the WICHITA CONSTRUCTION CO. for lengthening a bridge over the Arkansas River near Mount Hope, at $5,450; for building a bridge across the Ninnescah River near Cheney, at $6,500. Bids were opened Dec. 11. Noted Nov. 16.

York, Neb.—Bids will be received until Jan. 9 by H. F. Chapin, Clk. of York County, for constructing steel bridges during the year 1912.

Osceola, Ark.—Bids will be received until 10 a. m., Jan. 25, by Drainage District No. 9, Mississippi County, for constructing 22 steel bridges, according to specifications furnished at the County Court House at Osceola. This work is in connection with work in Drainage District No. 9. The Morgan Engineering Co., Memphis, Tenn., are Consult. Engrs. Noted under Miscellaneous this week.

Houston, Tex.—Bids for the construction of two reinforced concrete bridges on Houston Ave., over White Oak Bayou and a tributary, were received Dec. 18, by the City Council, as follows: Main bridge across White Oak bayou, 230 ft. long and 51 ft. wide; (b) bridge across a branch of White Oak bayou 74 ft. long and 51 ft. wide; Texas Grading Co., Houston, (a) $18,240, (b) $6,-750. Spence & Howe Construction Co., Port Arthur, Tex., (a) $20,637; (b) $6,-879. Horton & Horton, Houston, (a) $20,089; (b) $7,200. Southwestern Concrete Co., Gonzales, Tex., (a) $15,995; (b) $6,590. Pearson & Co., Houston, (a) $21,000; (b) $8,000. Gulf Construction Co., Houston, (a) $17,200; (b) $6,-785. W. P. Carmichael Co., St. Louis, Mo., (a) $18,600; (b) $6,850. Epley & Leonard, Houston, (a) $18,300; (b) $6,-400. Noted Dec. 7.

Buckley, Wash.—The Commissioners of Pierce and King Counties have decided to construct a bridge over the White River at Buckley. The bridge will be 200 ft. long, of steel, with concrete piers. Estimated cost, from $15,-000 to $20,000.

Port Angeles, Wash.—Bids will be received until Jan. 2, by R. D. McLaughlin, County Audr., for constructing a bridge across Siebert's River.

Sunnyside, Wash.—Bids will be received until 8 p. m., Jan. 8, by the Town Clerk, for constructing a bridge across Snipes Mountain Lateral on Stackhouse St. Plans are on file at the office of the Town Engineer.

Roseburg, Ore.—Bids will be received until Dec. 30 by the County Court, at Roseburg, for constructing two bridges and repairing one bridge.

Scotia, Cal.—O. W. Simonson, Engr. at Scotia for the Pacific Lumber Co., Pine and Battery Sts., San Francisco, has completed plans for the construction of a steel bridge across Eel River above Scotia. Estimated cost, $148,000.

Los Angeles, Cal.—Bids will be received until 2 p. m., Jan. 28, for constructing a concrete bridge across Sawpit Wash on Wild Rose Ave., in Duarye Road District. H. J. Lelande is County Clk.

BUILDINGS.

*(*Denotes that this work is advertised in Engineering News.)*

Boston, Mass.—A municipal building will be built at Broadway and H St., South Boston District. Manus J. Fish is Supt. Public Bldgs.

An addition will be made to the Museum of Fine Arts. The cost will be about $500,000. Guy Lowell, 1128 Tremont Bldg., Boston, is Arch.

An Engineers' Club has been formed, the intention being to purchase an old building on Commonwealth Ave., to expend $50,000 in remodelling it into a clubhouse. Ira N. Hollis, Harvard University, Cambridge, is interested.

Springfield, Mass.—A 3-story block will be built for Jacob Stoechel at Franklin and Tracy Sts. William B. Reid, of Holyoke, is Arch.

Westfield, Mass.—Bids were received as follows on Dec. 20, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Westfield, Mass.: (a) limestone; (b) sandstone: James A. Munroe, North Attleboro, Mass., (a) $56,887; (b) $59,887. William H. Fissell & Co., New York, N. Y., (a) $59,600. Thomas W. Cissell, Connellsville, Pa., (a) $56,500; (b) $57,400. Conners Bros. Co., Lowell, Mass., (a) $59,-930. King Lumber Co., Charlottesville, Va., (a) $62,700; (b) $65,000. Merrick Fire Proofing Co., New York, (a) $66,600; (b) $68,300. Westchester Engineering Co., New York, (a) $67,-700; (b) $59,700. F. L. McKenzie, Boston, Mass., (a) $71,171; (b) $72,500. James J. O'Neill, Holyoke, Mass., (a) $72,895; (b) $73,900. Kaspar Ranger, Holyoke, Mass., (a) $68,046; (b) $70,-842.

Springfield, Mass.—The F. A. Bassett Co., 53 Hillman St., Springfield, will erect a building on West State St.

Cambridge, Mass.—Plans have been filed for a 3-story brick dwelling on Quincy St. for Dr. A. Lawrence Lowell Pres. of Harvard University. The cost will be about $65,000.

Woonsocket, R. I.—The contract has been awarded to WALKER & DOYLE, Providence, at $42,065, for an addition to Woonsocket State Armory. Noted Nov. 30.

Hartford, Conn.—The State Tuberculosis Commission, George I. Allen, Secy., Hartford, have purchased a site for a home in Norwich, and it is said bids soon will be asked for the various buildings required for the home.

New Canaan, Conn.—Alfred H. Taylor, Arch., 138 West 65th St., New York, N. Y., has been selected architect in the competition for the new public library. Bids will be received in about three weeks.

Albany, N. Y.—The erection of a State Temple of Justice, a new executive mansion, a State militia building, and a State arsenal in Albany, has been approved by Governor Dix. Tentative plans have been prepared.

New Rochelle, N. Y.—The Board of Police Commissioners has awarded to ROBERT S. POLLOCK CO., 18 East 28th St., New York, N. Y., the contract to erect the new court house here, at $67,567.

✚**Buffalo, N. Y.**—The contract has been awarded to WILLIAM MOORE & CO., 1285 West Second St., Cleveland, for the construction of a large warehouse at Buffalo, N. Y., for Libby, McNeill & Libby.

New York, N. Y.—Bids for masonry are being received by the Lyceum Building Co., 60 Broadway, for a 12-story apartment house at 110th St. west of Columbus Ave. Walter Haefell, 17 Madison Ave., is Arch.

Plans have been completed by George Fred Pelham, Arch., 507 Fifth Ave., for a 5-story tenement house at 178th St. and Pinehurst Ave. The cost is estimated at $60,000. The Emmay Realty Co., 802 West 181st St., is the owner.

Plans have been prepared by Rouse & Goldstone, Archs., 38 West 32d St., for a 9-story apartment house at 71st St. and Columbus Ave. The Allendale Building Co. is the owner. The cost is $275,000.

✚A 6-story tenement building will be erected by M. Goodman, 117 West 119th St., at 516-518 West 169th St. The cost will be about $60,000. George F. Pelham, 507 Fifth Ave., is Arch.

Plans have been prepared by Harry T. Howell, Arch., Third Ave. and 149th St., for a 6-story tenement house at 176th St., east of Wadsworth Ave. The cost will be about $80,000. Louis E. Bates Co., 833 East 165th St., is the owner.

Rochester, N. Y.—Preliminary plans for additions and improvements to the Monroe County Court House are in the hands of James L. Hotchkiss, County Clk. The cost is about $500,000.

Pittsburgh, Pa.—Plans have been prepared by M. Nirdlinger, Arch., Diamond Bank Bldg., Pittsburgh, for a 6-story brick, steel and reinforced-concrete building at 717 Forbes St. for the Scientific Materials Co.

Philadelphia, Pa.—Plans are being prepared by E. Allen Wilson, Arch., 1208 Chestnut St., Philadelphia, for an apartment house in West Philadelphia. The cost will be about $100,000.

Plans have been completed by H. H. De Hoff, Arch., 43 South 61st St., Philadelphia, for an apartment house at 44th and Walnut Sts.

Baltimore, Md.—Cook, Babb & Welch, Archs., New York, have been commissioned by the Johns Hopkins University, Dr. Ira Remsen, Pres., 712 North Howard St., to prepare plans and specifications for Geological Laboratory at Homewood; cost, $150,000. Joseph Evans Sperry, 409 Calvert Bldg., Baltimore, has been commissioned to prepare plans and specifications for Y. M. C. A. building to be erected at Homewood; cost, about $400,000. Parker, Thomas & Rice, Union Trust Bldg., Baltimore, have been commissioned to prepare plans and specifications for administration and acadmic buildings to be erected at Homewood for the Johns Hopkins University, Dr. Ira Remsen, Pres., 712 North Howard St. cost, about $250,000.

✚**Baltimore, Md.**—The Spedden Shipbuilding Co., Boston St., Boston, has awarded the contract to the PIEL CONSTRUCTION CO., 2441 Arunah Ave., Baltimore, for a warehouse on Boston St.

Plans and specifications are being prepared by George R. Morris, Arch., Gunther Bldg., Baltimore, for an apartment house on Morris and West Aves. The Cottage Apartment Co., Gunther Bldg., Baltimore, is owner.

Plans have been prepared by Henry J. T. Tinley, Arch., 314 North Charles St., Baltimore, for an apartment house at Windsor Hills. E. L. Tunis, Windsor Hills, is the owner.

Robert Garrett & Son, 503 Continental Bldg., Baltimore, will erect a bank building at German and South Sts. No architects have been retained.

John Freund, Arch., 210 East Lexington St., Baltimore, has been commissioned to prepare plans for a large warehouse at 14 North Howard St. The "Little Joe" Wiesenfield Co., Baltimore and Howard Sts., is the owner.

✚The contract has been awarded to JOHN HILTZ & SONS, 3 Clay St., Baltimore, for an office building at German and Charles Sts. The Savings Bank of Baltimore is owner.

Baltimore, Md.—Plans are being prepared by J. Appleton Wilson, Arch., Law Bldg., Baltimore, for an addition to School 67 at Old Frederick Road and Fairview Ave. The probable cost is $50,000.

Baltimore, Md.—Plans have been approved for the proposed school on Canton Ave. and Ann St. The cost will be about $80,000.

✚**Brunswick, Md.**—The contract has been awarded to LLOYD C. CULLER, Frederick, for erecting a high school. Alfred Cookman Leach, 323 North Charles St., Baltimore, is Arch.

✚**Norfolk, Va.**—The contract has been awarded to EAST & HOBBS, Norfolk, for building the Tazewell Theatre. M. S. Spratley is owner.

Bluefield, W. Va.—A Masonic Temple will be built. The cost will be about $50,000. No architect has been retained.

Arcadia, Fla.—Bids will be received by the County Commissioners until Jan. 2 for constructing a court house in Arcadia.

✚**Union City, Tenn.** — James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Union City, Tenn., to GEORGE W. STILES CONSTRUCTION CO., 217 La Salle St., Chicago, Ill., at $40,285.

Louisville, Ky.—Plans are being prepared by Joseph & Joseph, Arch., Commercial Bldg., Louisville, for a tuberculosis hospital. The cost will be about $40,000.

Louisville, Ky.—Alterations will be made to the store of H. J. Gutman, Fourth and Walnut Sts., Louisville. The cost will be about $40,000. Joseph & Joseph, Commercial Bldg., Louisville, are the Archs.

Louisville, Ky.—Tentative plans have been prepared for a Y. M. C. A. building at Third St. and Broadway. The structure will cost approximately $400,000 and will be fireproof throughout. McDonald & Dodd, Lincoln Bldg., Louisville, are Archs.

✚**Cleveland, Ohio.**—The contract has been awarded to E. F. Gebbons, Arch., 5700 Euclid Ave., Cleveland, to GEORGE A. RUTHERFORD CO., for the construction of a large storage building at West 78th St. and Detroit Ave., for the Fireproof Storage Co. The structure will be five stories high and of reinforced concrete construction.

Massillon, Ohio.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has rejected all bids for the construction of a U. S. post-office at Massillon, Ohio, as being in excess of the appropriation. Bids will be called for under readvertisement.

✚**Cleveland, Ohio.**—The contract has been awarded to D. C. GRIESE & WALKER CO., 1417 Prospect St., for the 4-story building on West 25th St. Fries & Schuele Co., 1958 West 25th St., Cleveland, are the owners.

Hamilton, Ohio.—The Knights of Pythias will build a temple on North Second St. The cost will be about $50,000.

Bloomington, Ind.—A home will be built by the Alpha Association of the Indiana University. William L. Bryan is Pres. The cost will be about $50,000.

Terre Haute, Ind.—Arrangements are being made for the erection of a Carnegie library in the northeast section of the city.

Kokomo, Ind. — Bids will be received by David C. Spraker for an office building on Mulbery St. Robert L. Young is owner.

Princeton, Ind.—The Commissioners of Gibson County are preparing to build a new jail. The present jail has been condemned.

Sheridan, Ind.—A site has been purchased in Main St. on which to build a Carnegie library. Bids will be in order as soon as plans have been completed.

Scipio, Ind.—The Township Trustee is preparing to ask for bids for the construction of a new school house in Scipio. The old school house has been condemned by the authorities.

Detroit, Mich.—The Library Board has adopted plans for the $55,000 library on Alger Ave.

✚**Hamtramck, Mich.**—The following contracts have been awarded by H. J. Rill, Buhl Bldg., Detroit, for the 2-story and basement school: Structural iron work to RUSSEL WHEEL & FOUNDRY CO., Cheve St. and Belt R. R.; masonry to JOSEPH LEPPEK, 179 Canfield Ave., Detroit; slate roofing to DETROIT CORNICE & SLATE CO., 147 St. Antoine St., Detroit. The cost will be about $80,000.

Chicago, Ill.—Plans are being prepared for a 6-story office building at 131 South Canal St. for the Crane Co., 1214 South Canal St., Chicago. The cost will be about $200,000.

Chicago, Ill.—Bids will be received by Marshall & Fox, Chicago, (general contractor) for the granite facing, mason, carpenter, plumbing, wiring, heating and gas fitting work on the $2,500,000 home office building of the Northwestern Mutual Life Insurance Co. Plans are on file in the office of George H. Bensenberg, Engr-in-Charge.

Madison, Wis.—The English Lutheran Congregation has purchased a site at University Ave. and Lake St. The cost will be about $50,000.

Milwaukee, Wis.—The Board of School Directors has purchased a site at Wright St. and Sherman Blvd. for the proposed Washington High School. The cost will be about $225,000. Frank M. Havbach is Secy. of Bd.

Racine, Wis.—Headed by the Deutschen Club, seven German societies have amalgamated for the purpose of building a $50,000 clubhouse on Park Ave.

Milwaukee Wis. — The general contract for the construction of a stockhouse for the Pabst Brewing Co. 917 Chestnut St. at Tenth and Chestnut Sts. has been awarded to HENRY DANISCHEFSKY, Milwaukee, at $60,000; Alex G. Goethe is Arch. General contractor will sublet parts of the work.

Lake Geneva, Wis.—Plans are being prepared by Frank L. Wright, Arch., Chicago for a $125,000 hotel and country house.

Des Moines, Iowa.—A resolution has been passed authorizing the construction of a $50,000 market house. James R. Hanna is Mayor.

Kansas City, Kan.—A site has been purchased at Linwood Blvd. and Garfield Ave. on which a Masonic temple will be built by the Ivanhoe Lodge. George S. McLanahan is Secy.

St. Louis, Mo.—A building will be constructed at Washington Ave. and 17th St. by the Seventeenth Street Realty Co.

St. Louis Mo.—The Empress Amusement Co. has had plans prepared for a theatre on Olive St. and Grand Ave. The cost will be about $93,000.

Corpus Christie, Tex.—A theatre will be built on Mesquite St. The cost will be about $75,000.

El Paso, Tex.—Plans are being prepared for a Masonic temple. The cost will be about $200,000.

Brownsville, Tex.—A court house will be built here. Plans have been selected by the County Commissioners. The cost will be about $200,000.

✚**Mount Vernon, Tex.**—A contract has been awarded L. R. WRIGHT & CO., Dallas, to build a new court house. The cost will be about $42,000. Plans by L. L. Thurman & Co., Archs, Dallas.

San Antonio, Tex.—The contract has been awarded to the STANDARD CONSTRUCTION CO., Houston, for building the proposed hospital at the Southwestern Insane Asylum. The cost will be about $45,000.

Waco, Tex.—A dwelling will be built on Austin and 18th Sts. by J. W. Riggins. The structure will be four stories with basement and will cost about $60,000.

✚**Centralia, Wash.**—The contract has been awarded to CHURCHILL-ROUNDS & Co., Seattle, Wasn., for a passenger station to be built by the Northern Pacific Ry. Co. The cost will be about $50,000.

Seattle, Wash.—A 9-room grade school will be erected by the School Board in the Ravenna District. The cost will be $62,000.

Seattle, Wash.—Plans have been filed for the proposed Healy Building to be built by the Cobb-Healy Investment Co. at 1418 Third Ave. The cost will be $150,000.

Spokane, Wash.—The City Council has retained Julius Zittel, Arch., Jameson Bldg., Spokane, to prepare plans and specifications for the proposed city hall. The cost will be about $200,000.

Grass Valley, Cal.—All bids received for building the proposed Elks' Home have been rejected. The Directors of the Elks' Building Association will probably receive new bids.

Los Angeles, Cal.—Plans are being prepared by C. A. Faithful, Arch., 2164 Third Ave., Los Angeles, for a shop and art science building at the Gardena High School.

Los Angeles, Cal.—The M. S. Connell Consolidated Realty Co. will build a 5-story concrete warehouse at 208 East Seventh St. The cost will be about $115,000.

Los Angeles, Cal.—The following bids were received by the Board of Education, Dec. 21, for the administration building at the Manual Arts High School at 42d St. and Vermount Ave. The bids received were as follows: General contract, Alta Planing Mill Co., 830 McGarry St., Los Angeles, (a) $127,-547 for the building of power house and arcades complete, (b) $118,835, omitting the power house, (c) $120,343, omitting the arcades connecting the administration building and the north and south buildings, (d) $127,153, omitting the arcades connecting the administration and shop buildings, (e) $119,949, omitting all the arcades, (f) $111,237, omitting the power house and all of the arcades; F. O. Engstrum Co., (a) $130,-765, (b) $117,369, (c) $121,315, (d) $125,-567, (e) $120,714, (f) $107,318; Los Angeles Planing Mill Co., (a) $147,700, (b) $139,172, (c) $139,342, (d) $147,200, (e) $138,895, (f) $130,303; Southwestern Construction Co., (a) $152,320, (b) $139,-756, (c) $141,654, (d) $151,620, (e) $140,-954, (f) $128,390; Willard-Slater Co., (a) $155,995, (b) $145,085, (c) $146,965, (d) $155,495, (e) $146,000, (f) $135,208; Crookshank & Somers, (a) $154,990, (b) $145,229, (c) $146,995, (d) $157,000, (e) $135,300; E. P. Hunziker, (a) $163,429, (b) $151,180, (e) $155,535, (d) $162,236, (e) $154,343, (f) $145,920.

Los Angeles, Cal.—Plans are being prepared by Hunt & Burns, Archs., 701 Laughlin Bldg., Los Angeles, for a school at Commonwealth Ave. and Third St. for the Board of Education. The cost will be about $50,000.

Los Angeles, Cal.—Plans are being prepared by Anton Rief, Arch., 404 Higgins Bldg., Los Angeles, for a 5-story, Class A building on Broadway and First St. for the Schumacher estate.

Los Angeles, Cal.—Plans are being prepared by Norman F. Marsh, Arch., Broadway Central Bldg., Los Angeles, for a Methodist Episcopal church. The cost will be about $130,000.

✚**Los Angeles, Cal.**—The contract has been awarded to the ALTA PLAINING MILL CO., 830 McGarry St., for the erection of a brick warehouse on First St. The cost will be about $42,000. The Los Angeles Soap Co. is the owner. Morgan, Walls & Morgan, Story Bldg., Los Angeles, are Archs.

Los Angeles, Cal.—Morgan, Walls & Morgan, Arch., 1114 Story Bldg., Los Angeles, have completed plans for the class A office and theatre building to

Electricity, until 2 p. m., Dec. 29, for furnishing, putting in place and maintaining 660 gas regulators, from Jan. 1, 1912, to Dec. 31, 1912, and for furnishing gas regulators in public buildings in the Boroughs of Manhattan and the Bronx; and for furnishing steam heat for heating or power purposes to certain public buildings from Jan. 1, 1912, to Dec. 31, 1912; and for furnishing steam to public buildings in the Boroughs of Manhattan and the Bronx.

Bids will be received by the Department of Public Charities, until 2.30 p. m., Jan. 2, for furnishing all the labor and materials required for underground conduit system, transformer vault, electric elevator and other work in the Metropolitan Hospital district; and for complete electric wiring and fixtures for Wards T and S, male dormitory, female tuberculosis building, and sun tents, solarium, pavilion Nos. 1 to 6, superintendent's residence, carpenter shop, coffin shop, stable, power house and laundry building for Metropolitan Hospital district; and for complete electric wiring and fixtures for new Roman Catholic Church, male infirmary and sun tents, and electric motors for laundry for Metropolitan Hospital district; and for furnishing labor for ground wire and labor and materials for grounding system, lightning arresters and automatic switchs for Metropolitan Hospital district. Michael J. Drummond is Comr.

Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., until 3 p. m., Jan. 2, for installing electric equipment in new Public School 40, at Pacific and Union Hall Sts., Jamaica, Borough of Queens.

Bids will be received by H. S. Thompson, Comr. of Water Supply, Gas and Electricity, until 2 p. m., Jan. 3, for furnishing, delivering and installing a steam heating system in engine room, storage house, etc., at the 179th St. pumping station.

Hoboken, N. J.—The Board of Education is considering the establishment of a power plant to supply electricity for lamps and motors for the schools throughout the city. The estimated cost is $25,000. Wilson Taylor is Pres. of Bd.

Finderne, N. J.—The H. W. Johns-Manville Co., 100 William St., New York, will build a power plant in connection with its manufacturing plant at Finderne. The estimated cost is $200,000.

***Long Branch, N. J.**—Bids will be received by the Board of Education until noon, Dec. 29, for installing an electric clock and bell system in a school building at Long Branch. John T. Britton is Secy. of Bd.

Altoona, Pa.—The Altoona & Logan Valley Electric Ry. Co. will build an addition to its power plant at Fifth Ave. and 32d St. in the near future. James Honor is Ch. Engr. of Power Station.

Morgantown, W. Va.—J. S. Kuhn and W. S. Kuhn, 345 Fourth Ave., Pittsburgh, Pa., will erect the dams on Cheat River for power purposes. The cost is estimated at $1,000,000.

+Hutchison, W. Va.—A contract for the installation of three 1,000-KW. gas engines, in connection with the power plant to be erected by the Consolidated Coal Co., Baltimore, Md., has been awarded to the BETHLEHEM STEEL CO., South Bethlehem, Pa. The estimated cost of the plant complete is $300,000.

Millville, W. Va.—Plans are being prepared for the erection of a high-tension transmission line from the electric plant of the Winchester & Washington City Ry. Co., at Millville, to Brunswick, Md. D. M. Swink, Millville, is Gen. Mgr.

+Sisterville, W. Va.—Ralph Broadwater, Pres., Sisterville Electric Light & Power Co., awarded contract to McCLINTIC-MARSHALL CONSTRUCTION CO., Rankin Station, P. O., Bradford, Pa., to erect steel building for power plant, 2,000-HP. capacity. The estimated cost is $95,000.

Maiden, N. C.—The installation of an electric lighting system in Maiden, is contemplated by the Council.

Wentworth, N. C.—Bids will soon be received by the Commissioners of Rockingham County for furnishing an electric light plant for the court house. J. P. McMichael, Wentworth, is Clk. of Comrs.

Douglas, Ga.—See item under Water Supply—Irrigation.

Macon, Ga.—The Council is considering the installation of electrical equipment to operate the water-works pumping station.

Washington, Ga.—All bids for the construction of the electric light plant have been rejected by the city. New bids will be received by Boyce Ficklen, Jr., City Clk., until Jan. 22. Noted Nov. 9 and Dec. 14.

Fort Pierce, Fla.—The city has voted a bond issue of $90,000 for public improvements, including the installation of an electric light plant.

Jacksonville, Fla.—Bids will be received by W. M. Bostwick, Jr., Chn. Bd. of Bond Trus., until Jan. 4, for furnishing the following: Electric-conduit wiring and fixtures for the new power station, wiring and fixtures for the old power station. Plans are on file at the office of the Board or the Scofield Engineering Co., Philadelphia, Pa.

Richton, Miss.—The construction of a power-house is contemplated by the Richton Light & Power Co. S. E. Shannon is Supt.

Lafayette, La.—The city is contemplating the improvement and extension of the municipal electric-light plant and water-works system. The estimated cost is $50,000.

Rayville, La.—Plans are being prepared by W. H. Wright, for an electric light plant to be built by the city.

Jackson, Tenn.—The Citizens' Gas Light Co. is considering plans for improvements to its plant and lighting system. About $20,000 will be expended by the company.

Falmouth, Ky.—Anderson & Frankel, Engrs., Lexington, have been retained to take charge of the engineering work in connection with the municipal electric light plant. A bond issue of $75,000 has been voted. N. C. Ridgeway is Mayor. Noted Nov. 23.

Uniontown, Ky.—The Home Lighting Co. is contemplating improvements to its electric light plant. A new building will be built and two 125-HP. boilers will be installed. G. W. Clements is Mgr.

Whitesburg, Ky.—Plans are being prepared by D. C. Mulling & Son, Partridge, for the construction of an electric light and power plant.

Island, Ky.—The installation of an electric street-lighting system is contemplated by the town. The electricity for operating the system will be secured from the plant of the Memphis Mining Co.

Covington, Ohio.—The Buckeye Light & Power Co. has been incorporated to build and operate gas and electric plants to furnish current for light and power. The incorporators are J. H. Marlin, Hugh C. Marlin, A. W. Landis, John Weaver and John Fenemore.

Greenville, Ohio. — Bids will be received by D. W. Shively, Dir. Pub. Ser., until Dec. 30, for furnishing electric street lamps, and gas lamps to the city for a term of eight years.

Anderson, Ind.—Plans are being prepared by the City Engineer for the installation of a lighting system in the business district of Anderson.

Grand Rapids, Mich.—The construction of a power plant in the factory district of Grand Rapids is contemplated by J. W. Spooner, Grand Rapids, and associates. The plant will have a capacity of 1,000 HP.

Bids will be received by the Board of Public Works until Jan. 25 for a 350 to 375-HP. water-tube boiler for the municipal lighting plant. Samuel A. Freshney is Secy. of Bd.

Champaign, Ill.—The city has voted a bond issue of $35,000 for the installation of a street lighting system of incandescent lamps.

Corydon, Iowa.—Bids will be received by J. C. Bower, Town Clk, until 8 p. m., Jan. 9 for improvements to the electric-light system.

Clara City, Minn.—A franchise has been granted to Charles Bush and E. Behrends for the installation of an electric-light plant in Clara City.

Waterville, Minn.—A franchise has been granted to the Consumers' Power Co. to construct and operate an electric-light plant in Waterville.

McCune, Kan.—The citizens are considering the installation of an electric-light plant.

Hillsboro, Kan.—The installation of an electric light system is contemplated by the town. Electricity will be secured from the municipal electric plant at McPherson.

Perry, Kan.—A bond issue of $5,000 has been voted for the installation of a municipal electric light plant.

Waterville, Kan. — See item under Water Supply—Irrigation.

Norfolk, Neb.—Plans are being prepared by Worley & Black, Engrs., Kansas City, Mo., for the installation of an electric light plant in Norfolk. The estimated cost is $75,000.

Elk City, Neb.—The Nebraska Transportation Co., Omaha, is considering the construction of a power plant at Elk City. The output of the proposed plant will be 21,000 HP.

Devils Lake, N. Dak.—The city is considering the installation of an electric lighting system. The estimated cost is $33,000. August Raff is City Engr.

Milton, N. Dak.—The city is considering the installation of an electric street lighting system.

Calvert, Tex. — A 50-year franchise has been granted by the City Council to the Calvert Water, Ice & Electric Co. The company will make extensive improvements to its light and water systems.

Seadrift, Tex.—G. W. Huff, Corpus Christi, will install an electric light plant.

+Carlsbad, N. Mex.—A contract for the construction of a concrete power dam across the Pecos River at Carlsbad, has been awarded to the PIERSON ENGINEERING & CONSTRUCTION CO., Hartford, Conn.

Boise, Idaho.—See item under Water Supply—Irrigation.

Fallon, Nev.—The Secretary of the Interior has authorized the Reclamation Service to purchase copper wire in the amount not to exceed $6,000 for use in the transmission line from Lahontan to Fallon.

Spokane, Wash.—Plans for the installation of a 500-KW. motor-generator set, are being considered by the Spokane & Inland Empire R. R. Co. R. C. Bowdish is Supt.

Vancouver, Wash.—A 50-year franchise has been granted to the Washington-Oregon Corporation to furnish light and power to Adna and Littell. W. B. Forshay, Vancouver, is Mgr.

Washougal, Wash.—An ordinance has been passed by the City Council granting the Northwestern Electric Co. the right to build and maintain an electric light and power system in Washougal.

Dallas, Ore.—A franchise has been granted to the Pacific Power & Light Co., Portland, to erect and maintain an electric light and power system at Dallas.

McMinnville, Ore.—The city has voted a bond issue of $75,000 for improvements. About $30,000 will be expended for light and water, $15,000 for water mains, and $30,000 for general street improvements.

Alameda, Cal.—Bids will be received by the Clerk of the City Council until 8 p. m., Jan. 2, for furnishing electrical equipment to the Department of Electricity as follows: 40,000 ft. of No. 10 duplex rubber-covered wire in 1,000-ft. coils; 1,100 ft. 3-in. black gas pipe; 40,000 ft. ¾ black enameled rigid conduit; 2,000 ft. 3½-in. black gas pipe; 275 3×3½ malleable black beaded reducers. F. F. Browning is Clk.

Half Moon Bay, Cal.—The citizens of Half Moon Bay are considering the installation of a street lighting system

... ka Commercial Bldg., San Francisco, ... Pres.

BRIDGES.

(+Denotes a contract awarded.)

Providence, R. I.—The city is considering the construction of a bridge over Providence River, between the Weybosset and Burnside bridges. Estimated cost, $60,000. Otis F. Clapp is City Engr.

***Fulton, N. Y.**—We are officially advised that bids for constructing a reinforced concrete arch bridge over the Oswego River at Broadway were received by the Board of Public Works Dec. 18, as follows: (a) Total; (b) paving; (c) concrete; (d) reduction, if awarded state contract: Pratt & Phillip, Massena, N. Y., (a) $143,621, (c) $10.00 per cu. yd.; Owego Bridge Co., Owego, N. Y., (a) $130,000, (b) $1.60 per sq. yd., (c) $7 (d) $1; L. B. Cleveland, Cleveland Bldg., Watertown, N. Y., (a) $125,785, (b) $2, (c) $6.50, (d) $12,000; S. Pearson & Son, Inc., 507 Fifth Ave., New York, (a) $187,028, (b) $2.80, (c) $10; Holton D. Robinson, 357 West 121st St., New York, (a) $155,700, (b) $2.50, (c) $6; H. E. Fox, 81 East 125th St., New York, (a) $134,000, (b) $2.40, (c) $8, (d) $1; McHarg, Barton & Co., 165 Broadway, New York, (a) $153,700, (b) $2.40, (c) $5.20, (d) $1,000; T. A. Gillispie Co., 50 Church St., New York, (a) $144,000, (b) $12.20, (c) $9, (d) $1,000. This is the city's portion of Barge Canal Contract No. 104. Plans for the bridge were prepared by the Concrete Steel Engineering Co., Park Row Bldg., New York. Noted Dec. 7.

Bids for the portion of the work to be done by the state were received Dec. 20 by Charles E. Treman, Supt. Pub. Wks., Albany, as follows: Pratt & Phillips, Messina, N. Y., $143,621; T. A. Gillespie Co., 50 Church St., New York, $144,000; McHarg, Barton & Co., 165 Broadway, New York, $153,700; Holton D. Robinson, 357 West 121st St., New York, $155,700; S. Pearson & Son, 507 Fifth Ave., New York, $187,028. These bids were exclusive of the bridge pavement. The bridge to be constructed by the state at Fulton under Contract No. 104 is to ... in conjunction with a similar structure over the Oswego River to be constructed by the city of Fulton, the two bridges to be so erected as to form one continuous structure.

Bloomsburg, Pa.—See item under Electric Railways.

Pawling, Pa.—The Commissioners of Chester and Montgomery Counties have decided to build a 3-span girder bridge over the Schuylkill River at Pawling. Estimated cost, $30,000. Noted Dec. 7.

***Bristol, Pa.**—See item under "Proposals."

Norfolk, Va.—Plans have been prepared by W. T. Brooke, City Engr., for a bridge to be erected between old Norfolk and the Eighth Ward. The bridge will be of steel, ... concrete piers, and will have a draw-span. Estimated cost. $450,000.

Salisbury, N. C.—Bids will soon be asked by the Commissioners of Rowan and Davie Counties for constructing a bridge across South River. The bridge will be 450 ft. long, and from 12 to 16 ft. wide. Estimated cost, $6,000. C. E. Miller, Salisbury, is Engr.

Jacksonville, Fla.—Bids will be received until Dec. 29, by the Board of Commissioners of Duval County, for the construction of a bridge over McGirts Creek on the road leading from New York Ave. to the old Orange Park. Plans and specifications are on file

... material may be seen at the office of the County Surveyor, at Sandusky. John Derst is County Audr.

Richmond, Ind.—The Commissioners of Wayne County have decided to construct a bridge across White Water River at South L St. Estimated cost $60,000. John Mueller is County Bridge Engr. Noted Dec. 21.

Vassar, Mich.—We are officially advised that a bridge will be erected over Cass River at Vassar. Estimated cost $10,000. Harry Dean is Town Clk. Noted Dec. 14.

Saginaw, Mich.—The Board of Supervisors of Saginaw County are considering the construction of a 180-ft. span bridge, 20 ft. wide, over Swan Creek on the Gratiot Road. Estimated cost $10,000.

Waukegan, Ill.—The Board of City Commissioners have adopted a resolution authorizing the construction of a bridge over the ravine at Genesee St. The bridge is to be 82 ft. wide, of concrete construction, and is estimated to cost $74,000. M. J. Douthitt is City Engr. Noted Nov. 23.

+Atkinson, Ill.—We are officially advised that contracts for constructing a 140-ft. steel viaduct with concrete floor and abutments on the highway between Atkinson and Alba, were awarded Dec. 21, as follows: Superstructure to the JOLIET BRIDGE & IRON CO., Joliet, Ill.; substructure to JOSEPH KLEIN, Freeburg, Ill. Total cost, $5,170. Noted Dec. 21.

+Wichita, Kan.—Contracts for bridge work have been awarded by the Board of Commissioners of Sedgwick County as follows: To the MISSOURI VALLEY BRIDGE & IRON CO., Leavenworth, Kan., for constructing a steel and concrete bridge over Chisholm Creek, Kechi Township, at $1,800; to the WICHITA CONSTRUCTION CO. for lengthening a bridge over the Arkansas River near Mount Hope, at $5,450, for building a bridge across the Ninnescah River near Cheney, at $6,500. Bids were opened Dec. 11. Noted Nov. 16.

York, Neb.—Bids will be received until Jan. 9 by H. F. Chapin, Clk. of York County, for constructing steel bridges during the year 1912.

Osceola, Ark.—Bids will be received until 10 a. m., Jan. 25, by Drainage District No. 9, Mississippi County, for constructing 22 steel bridges, according to specifications furnished at the County Court House at Osceola. This work is in connection with work in Drainage District No. 9. The Morgan Engineering Co., Memphis, Tenn., are Consult. Engrs. Noted under Miscellaneous this week.

Houston, Tex.—Bids for the construction of two reinforced concrete bridges on Houston Ave., over White Oak Bayou and a tributary, were received Dec. 18, by the City Council, as follows: Main bridge across White Oak bayou, 230 ft. long and 51 ft. wide; (b) bridge across a branch of White Oak bayou 74 ft. long and 51 ft. wide; Texas Grading Co., Houston, (a) $18,240, (b) $6,-750. Spence & Hows Construction Co., Port Arthur, Tex., (a) $20,637; (b) $6,-879. Horton & Horton, Houston, (a) $20,089; (b) $7,200. Southwestern Concrete Co., Gonzales, Tex., (a) $15,995; (b) $6,590. Pearson & Co., Houston, (a) $21,000; (b) $8,000. Gulf Construction Co., Houston, (a) $17,200; (b) $6,-786. W. P. Carmichael Co., St. Louis, Mo., (a) $18,600; (b) $6,880. Epley & Leonard, Houston, (a) $18,300; (b) $6,-440. Noted Dec. 7.

Wash.—The Commissioners

Albany, N. Y.—The erection of a State Temple of Justice, a new executive mansion, a State militia building, and a State arsenal in Albany, has been approved by Governor Dix. Tentative plans have been prepared.

New Rochelle, N. Y.—The Board of Police Commissioners has awarded to ROBERT S. POLLOCK CO., 18 East 28th St., New York, N. Y., the contract to erect the new court house here, at $67,567.

✚**Buffalo, N. Y.**—The contract has been awarded to WILLIAM MOORE & CO., 1285 West Second St., Cleveland, for the construction of a large warehouse at Buffalo, N. Y., for Libby, McNeill & Libby.

New York, N. Y.—Bids for masonry are being received by the Lyceum Building Co., 60 Broadway, for a 12-story apartment house at 110th St. west of Columbus Ave. Walter Haefeli, 17 Madison Ave., is Arch.

Plans have been completed by George Fred Pelham, Arch., 507 Fifth Ave., for a 5-story tenement house at 178th St. and Pinehurst Ave. The cost is estimated at $60,000. The Emmay Realty Co., 802 West 181st St., is the owner.

Plans have been prepared by Rouse & Goldstone, Archs., 38 West 32d St., for a 9-story apartment house at 71st St. and Columbus Ave. The Allendale Building Co. is the owner. The cost is $275,000.

✚A 6-story tenement building will be erected by M. Goodman, 117 West 119th

Arcadia, Fla.—Bids will be received by the County Commissioners until Jan. 2 for constructing a court house in Arcadia.

✚**Union City, Tenn.** — James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Union City, Tenn., to GEORGE W. STILES CONSTRUCTION CO., 217 La Salle St., Chicago, Ill., at $40,285.

Louisville, Ky.—Plans are being prepared by Joseph & Joseph, Arch., Commercial Bldg., Louisville, for a tuberculosis hospital. The cost will be about $40,000.

Louisville, Ky.—Alterations will be made to the store of H. J. Gutman, Fourth and Walnut Sts., Louisville. The cost will be about $40,000. Joseph & Joseph, Commercial Bldg., Louisville, are the Archs.

Louisville, Ky.—Tentative plans have been prepared for a Y. M. C. A. building at Third St. and Broadway. The structure will cost approximately $400,000 and will be fireproof throughout. McDonald & Dodd, Lincoln Bldg., Louisville, are Archs.

✚**Cleveland, Ohio.**—The contract has been awarded to E. F. Gebbons, Arch., 5700 Euclid Ave., Cleveland, to GEORGE A. RUTHERFORD CO., for the construction of a large storage building at West 78th St. and Detroit Ave., for the Fireproof Storage Co. The structure will be five stories high and of reinforced concrete construction.

Massillon, Ohio.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has rejected all bids for the construction of a U. S. post-office at Massillon, Ohio, as being in excess of the appropriation. Bids will be called for under readvertisement.

✚**Cleveland, Ohio.**—The contract has been awarded to D. C. GRIESE & WALKER CO., 1417 Prospect St., for the 4-story building on West 25th St. Fries & Schuele Co., 1953 West 25th St., Cleveland, are the owners.

Hamilton, Ohio.—The Knights of Pythias will build a temple on North Second St. The cost will be about $50,000.

Bloomington, Ind.—A home will be built by the Alpha Association of the Indiana University. William L. Bryan is Pres. The cost will be about $50,000.

Terre Haute, Ind.—Arrangements are being made for the erection of a Carnegie library in the northeast section of the city.

Kokomo, Ind. — Bids will be received by David C. Spraker for an office building on Mulbery St. Robert L. Young is owner.

Princeton, Ind.—The Commissioners of Gibson County are preparing to build a new jail. The present jail has been condemned.

Sheridan, Ind.—A site has been purchased in Main St. on which to build a Carnegie library. Bids will be in order as soon as plans have been completed.

Scipio, Ind.—The Township Trustee is preparing to ask for bids for the construction of a new school house in Scipio. The old school house has been condemned by the authorities.

Detroit, Mich.—The Library Board has adopted plans for the $55,000 library on Alger Ave.

✚**Hamtramck, Mich.**—The following contracts have been awarded by H. J. Rill, Buhl Bldg., Detroit, for the 2-story and basement school: Structural iron work to RUSSEL WHEEL & FOUNDRY CO., Cheve St. and Belt R. R.; masonry to JOSEPH LEPPEK, 179 Canfield Ave., Detroit; slate roofing to DETROIT CORNICE & SLATE CO., 147 St. Antoine St., Detroit. The cost will be about $80,000.

Chicago, Ill.—Plans are being prepared for a 6-story office building at 131 South Canal St. for the Crane Co., 1214 South Canal St., Chicago. The cost will be about $200,000.

Chicago, Ill.—Bids will be received by Marshall & Fox, Chicago, (general contractor) for the granite facing, mason, carpenter, plumbing, wiring, heating and gas fitting work on the $2,500,000 home office building of the Northwestern Mutual Life Insurance Co. Plans are on file in the office of George H. Benzenberg, Engr-in-Charge.

Madison, Wis.—The English Lutheran Congregation has purchased a site at University Ave. and Lake St. The cost will be about $50,000.

Milwaukee, Wis.—The Board of School Directors has purchased a site at Wright St. and Sherman Blvd. for the proposed Washington High School. The cost will be about $225,000. Frank M. Havbach is Secy. of Bd.

Racine, Wis.—Headed by the Deutschen Club, seven German societies have amalgamated for the purpose of building a $50,000 clubhouse on Park Ave.

Milwaukee Wis. — The general contract for the construction of a stockhouse for the Pabst Brewing Co. 917 Chestnut St. at Tenth and Chestnut Sts. has been awarded to HENRY DANISCHEFSKY, Milwaukee, at $60,000; Alex G. Goethe is Arch. General contractor will sublet parts of the work.

Lake Geneva, Wis.—Plans are being prepared by Frank L. Wright, Arch., Chicago for a $125,000 hotel and country house.

Des Moines, Iowa.—A resolution has been passed authorizing the construction of a $50,000 market house. James R. Hanna is Mayor.

Kansas City, Kan.—A site has been purchased at Linwood Blvd. and Garfield Ave. on which a Masonic temple will be built by the Ivanhoe Lodge. George S. McLanahan is Secy.

St. Louis, Mo.—A building will be constructed at Washington Ave. and 17th St. by the Seventeenth Street Realty Co.

St. Louis Mo.—The Empress Amusement Co. has had plans prepared for a theatre on Olive St. and Grand Ave. The cost will be about $93,000.

Corpus Christie, Tex.—A theatre will be built on Mesquite St. The cost will be about $75,000.

El Paso, Tex.—Plans are being prepared for a Masonic temple. The cost will be about $200,000.

Brownsville, Tex.—A court house will be built here. Plans have been selected by the County Commissioners. The cost will be about $200,000.

✚**Mount Vernon, Tex.**—A contract has been awarded L. R. WRIGHT & CO., Dallas, to build a new court house. The cost will be about $42,000. Plans by L. L. Thurman & Co., Archs, Dallas.

San Antonio, Tex.—The contract has been awarded to the STANDARD CONSTRUCTION CO., Houston, for building the proposed hospital at the Southwestern Insane Asylum. The cost will be about $45,000.

Waco, Tex.—A dwelling will be built on Austin and 18th Sts. by J. W. Riggins. The structure will be four stories with basement and will cost about $60,000.

✚**Centralia, Wash.**—The contract has been awarded to CHURCHILL-ROUNDS & Co., Seattle, Wash., for a passenger station to be built by the Northern Pacific Ry. Co. The cost will be about $50,000.

Seattle, Wash.—A 9-room grade school will be erected by the School Board in the Ravenna District. The cost will be $62,000.

Seattle, Wash.—Plans have been filed for the proposed Healy Building to be built by the Cobb-Healy Investment Co. at 1418 Third Ave. The cost will be $150,000.

Spokane, Wash.—The City Council has retained Julius Zittel, Arch., Jameson Bldg., Spokane, to prepare plans and specifications for the proposed city hall. The cost will be about $200,000.

Grass Valley, Cal.—All bids received for building the proposed Elks' Home have been rejected. The Directors of the Elks' Building Association will probably receive new bids.

Los Angeles, Cal.—Plans are being prepared by C. A. Faithful, Arch., 2164 Third Ave., Los Angeles, for a shop and art science building at the Gardena High School.

Los Angeles, Cal.—The M. S. Connell Consolidated Realty Co. will build a 5-story concrete warehouse at 208 East Seventh St. The cost will be about $115,000.

Los Angeles, Cal.—The following bids were received by the Board of Education, Dec. 21, for the administration building at the Manual Arts High School at 42d St. and Vermount Ave. The bids received were as follows: General contract, Alta Planing Mill Co., 830 McGarry St., Los Angeles, (a) $127,-647 for the building of power house and arcades complete, (b) $118,835, omitting the power house, (c) $120,343, omitting the arcades connecting the administration building and the north and south buildings, (d) $127,153, omitting the arcades connecting the administration and shop buildings, (e) $119,949, omitting all the arcades, (f) $111,237, omitting the power house and all of the arcades; F. O. Engstrum Co., (a) $130,-765, (b) $117,369, (c) $121,315, (d) $125,-567, (e) $120,714, (f) $107,318; Los Angeles Planing Mill Co., (a) $147,700, (b) $139,172, (c) $139,342, (d) $147,200, (e) $138,895, (f) $130,303; Southwestern Construction Co., (a) $152,320, (b) $139,-756, (c) $141,654, (d) $151,620, (e) $140,-954, (f) $128,390; Willard-Slater Co., (a) $155,995, (b) $145,085, (c) $146,965, (d) $155,495, (e) $146,000, (f) $135,208; Crookshank & Somers, (a) $152,990, (b) $145,229, (c) $146,995, (d) $157,000, (e) $135,300; E. P. Hunziker, (a) $163,429, (b) $151,180, (e) $155,535, (d) $162,236, (e) $154,343, (f) $145,920.

Los Angeles, Cal.—Plans are being prepared by Hunt & Burns, Archs., 701 Laughlin Bldg., Los Angeles, for a school at Commonwealth Ave. and Third St. for the Board of Education. The cost will be about $50,000.

Los Angeles, Cal.—Plans are being prepared by Anton Rief, Arch., 404 Higgins Bldg., Los Angeles, for a 5-story, Class A building on Broadway and First St. for the Schumacher estate.

Los Angeles, Cal.—Plans are being prepared by Norman F. Marsh, Arch., Broadway Central Bldg., Los Angeles, for a Methodist Episcopal church. The cost will be about $130,000.

✚**Los Angeles, Cal.**—The contract has been awarded to the ALTA PLAINING MILL CO., 830 McGarry St., for the erection of a brick warehouse on First St. The cost will be about $42,000. The Los Angeles Soap Co. is the owner. Morgan, Walls & Morgan, Story Bldg., Los Angeles, are Archs.

Los Angeles, Cal.—Morgan, Walls & Morgan, Arch., 1114 Story Bldg., Los Angeles, have completed plans for the class A office and theatre building to

Springfield, Mass.—A 3-story block will be built for Jacob Stoechel at Franklin and Tracy Sts. William B. Reid, of Holyoke, is Arch.

Westfield, Mass.—Bids were received as follows on Dec. 20, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Westfield, Mass.: (a) limestone; (b) sandstone: James A. Munroe, North Attleboro, Mass., (a) $56,887; (b) $59,887. William H. Fissell & Co., New York, N. Y., (a) $59,600. Thomas W. Cissell, Connellsville, Pa., (a) $56,500; (b) $57,400. Conners Bros. Co., Lowell, Mass., (a) $59,-930. King Lumber Co., Charlottesville, Va., (a) $62,700; (b) $65,000. Merrick Fire Proofing Co., New York, (a) $66,600; (b) $68,300. Westchester Engineering Co., New York, (a) $57,-700; (b) $59,700. F. L. McKenzie, Boston, Mass., (a) $71,171; (b) $72,500. James J. O'Neill, Holyoke, Mass., (a) $72,595; (b) $73,900. Kaspar Ranger, Holyoke, Mass., (a) $68,046; (b) $70,-842.

Springfield, Mass.—The F. A. Bassett Co., 53 Hillman St., Springfield, will erect a building on West State St.

Cambridge, Mass.—Plans have been filed for a 2-story brick dwelling on Quincy St. for Dr. A. Lawrence Lowell Pres. of Harvard University. The cost will be about $65,000.

Woonsocket, R. I.—The contract has been awarded to WALKER & DOYLE, Providence, at $42,065, for an addition to Woonsocket State Armory. Noted Nov. 30.

Hartford, Conn.—The State Tuberculosis Commission, George I. Allen, Secy., Hartford, have purchased a site for a home in Norwich, and it is said bids soon will be asked for the various buildings required for the home.

New Canaan, Conn.—Alfred H. Taylor, Arch., 138 West 65th St., New York, N. Y., has been selected architect in the competition for the new public library. Bids will be received in about three weeks.

CONSTRUCTION CO., 2441 Arunah Ave., Baltimore, for a warehouse on Boston St.

Plans and specifications are being prepared by George R. Morris, Arch., Gunther Bldg., Baltimore, for an apartment house on Morris and West Aves. The Cottage Apartment Co., Gunther Bldg., Baltimore, is owner.

Plans have been prepared by Henry J. T. Tinley, Arch., 314 North Charles St., Baltimore, for an apartment house at Windsor Hills. E. L. Tunis, Windsor Hills, is the owner.

Robert Garrett & Son, 503 Continental Bldg., Baltimore, will erect a bank building at German and South Sts. No architects have been retained.

John Freund, Arch., 210 East Lexington St., Baltimore, has been commissioned to prepare plans for a large warehouse at 14 North Howard St. The "Little Joe" Wiesenfield Co., Baltimore and Howard Sts., is the owner.

✚The contract has been awarded to JOHN HILTZ & SONS, 3 Clay St., Baltimore, for an office building at German and Charles Sts. The Savings Bank of Baltimore is owner.

Baltimore, Md.—Plans are being prepared by J. Appleton Wilson, Arch., Law Bldg., Baltimore, for an addition to School 67 at Old Frederick Road and Fairview Ave. The probable cost is $50,000.

Baltimore, Md.—Plans have been approved for the proposed school on Canton Ave. and Ann St. The cost will be about $80,000.

✚**Brunswick, Md.**—The contract has been awarded to LLOYD C. CULLER, Frederick, for erecting a high school. Alfred Cookman Leach, 323 North Charles St., Baltimore, is Arch.

✚**Norfolk, Va.**—The contract has been awarded to EAST & HOBBS, Norfolk, for building the Tazewell Theatre. M. S. Spratley is owner.

Bluefield, W. Va.—A Masonic Temple will be built. The cost will be about $50,000. No architect has been retained.

be built on Broadway, between Seventh and Eighth Sts., for William Garland at a cost of $400,000.

Plans have been prepared by F. A. Noyes, Jr., Arch., 220 Story Bldg., Los Angeles, for a 3-story apartment house to be erected at Estrella and 23d Sts. Mrs. Anita Summerlin is the owner.

Plans are being completed by Myron Hunt, Arch., 1017 Union Trust Bldg., Los Angeles, for the first group of buildings, consisting of liberal arts, science, gymnasium, dormitory, power house and commons and observatory buildings to be erected at Eagle Rock for the Occidental College at an initial cost of $300,000.

Benjamin L. Gubsen, Arch., 1014 Gramacy Place, Los Angeles, has prepared plans for a 3-story and basement class C apartment house on Alverado Terrace. The estimated cost is $50,000.

✚The general contract for the administration building at the Manual Arts High School at 42d St. and Vermont Ave., was awarded to the ALTA PLANING MILL CO., 530 McGarry St., at $127,547.

Oakland, Cal.—R. A. Carey, of San Leandro and his associates will erect a 7-story reinforced concrete hotel at 13th and Harrison Sts., to cost $100,000.

✚**Oakland, Cal.**—The contract has been awarded to P. J. WALKER CO., Monadnock Bldg., San Francisco, for a concrete store building on 14th St. The cost will be about $60,000. J. M. Locke, Oakland, is owner.

Pasadena, Cal.—The old opera house on South Raymond Ave. will be converted into a warehouse. The cost will be about $100,000.

***Santa Barbara, Cal.**—Bids will be received by James Knox Taylor, Superv Arch., Treasury Dept., Wasnington, D. C., until 3 p. m., Jan. 29, for construction of a 2-story and basement building of approximately 6,565 sq. ft. ground area, for the U. S. post-office at Santa Barbara, Cal. Drawings and specifications may be obtained from the custodian of the site at Santa Barbara, Cal., or at the office of the Supervising Architect.

San Francisco, Cal.—C. M. & A. F. Rousseau, Archs., Monadnock Bldg., are preparing plans for a 3-story and basement apartment house on Washington St., between Gough and Octavia Sts. The cost will be about $40,000.

San Bernardino, Cal.—Fred F. Harris, Arch., Union Bank Bldg., Redlands, has been commissioned to prepare plans for a 3-story Y. M. C. A. building. The cost will be about $60,000.

San Francisco, Cal.—St. Luke's Hospital Association will build a 4-story reinforced-concrete hospital on the block bounded by Army, Duncan, San Jose and Valencia Sts. The cost will be about $250,000.

San Francisco, Cal.—Plans have been completed by the Harbor Board for two new ferry buildings, one to be located north and the other south of the present one. Joseph J. Dwyer is Pres. of the State Bd. of Harbor Comrs.

San Francisco, Cal.—Plans are being prepared by G. Albert Lansburg, Arch., Gunst Bldg., San Francisco, for a 5-story and basement brick warehouse at 15th and Rhode Island Sts. The J. I. Chase Threshing Machine Co. is owner.

✚**Ventura, Cal.**—The contract has been awarded to the LOS ANGELES PRANING MILLS CO., 1812 Industrial St., Los Angeles, for the construction of a court house. Albert C. Martin, 430 Higgins Bldg., Los Angeles, is Arch.

Modesto, Cal.—Plans are being prepared by W. J. Wright, Arch., Stockton, for a high school. The cost will be about $90,000.

Montreal, Que.—A 5-story building will be built at Victoria and St. Catherine St. by Johnstone Bros., 483 St. the E. B. Eddy Co. The cost will be about $40,000.

Toronto, Ont.—A 4-story warehouse will be built at 73 Wellington St. by E. B. Eddy Co. The cost will be about $40,000.

WATER SUPPLY—IRRIGATION.

(✚*Denotes a contract awarded.*)

St. Albans, Vt.—The citizens voted Dec. 14 to issue $60,000 of bonds for additional water supply.

Hudson, Falls, N. Y.—The citizens voted Dec. 14 in favor of issuing $175,000 of bonds for the installation of a gravity water system.

New York, N. Y.—Bids will be received until Jan. 3 by Henry S. Thompson, Comr. Water Supply, Gas and Electricity for furnishing and delivering valves for the five boroughs, and for furnishing and constructing a chlorinating plant at Katonah, Westchester County, N. Y.

New York, N. Y.—Bids were received by the Park Board Dec. 14 for furnishing and laying water mains and appurtenances in various places as required in Central Park, Boro. Manhattan. The lowest bid was submitted by the McHarg-Barton Co., 165 Broadway, New York, at $27,918.

New York, N. Y.—Bids will be received by Henry S. Thompson, Water Supply, Gas and Electricity, until 2 p. m., Jan. 5, for furnishing, delivering and laying water-mains and appurtenances at the Ridgewood Engine House in Logan and Fulton Sts., and in Arlington and Jamaica Aves., Boro. Brooklyn, and for furnishing and delivering valves.

Hempstead (L. I.), N. Y.—The State Conservation Commission, Albany, approved the plans Dec. 22, of the Water Commissioners of the Manhasset-Lakeville Water District, of North Hempstead, Nassau County, for a new water supply.

Niagara Falls, N. Y.—Contracts will soon be awarded for equipment for the filtration plant. F. S. Parkhurst, Jr., is City Engr.

Ramsey, N. J.—Plans are being prepared for the installation of a waterworks system here.

Pittsburg, Pa.—The Council is considering the construction and equipment of new reservoirs on the North Side. Estimated cost, $990,000.

South Sharon, Pa.—The city will have preliminary plans prepared for and an estimate made of the cost of installing a water-works system.

***Norfolk, Va.**—See "Proposals."

Kimball, W. Va.—The owner of the franchise for the water-works and electric light plant here has awarded contract for construction work to the RUSSELL CO., Dayton, Ohio, at about $50,000.

Miller, W. Va.—The Baltimore & Ohio R. R. Co., F. L. Stuart, Ch. Engr., Charles and Baltimore Sts., Baltimore, Md., has awarded the contract to the HUFFMAN-CONKLIN CO., Columbus, Ohio, for constructing a waterline here, at $10,000.

Albermarle, N. C.—Bids will be received by the Mayor and Board of Commissioners until 8 p. m., Jan. 16, for constructing water-works. The work involves the construction of a pumping station, clear-water basin, deep well, two motor-driven turbine pumps, 750 gals. per min. each, a switchboard and one mile of pole line; tower and tank and about five miles of 6 to 10-in. pipe line. Plans and specifications are on file at the offices of the Mayor and Gilbert C. White, Engr., Charlotte, N. C. Noted Sept. 21.

Charlotte, N. C.—The Board of Water Commissioners will ask for bids in January for constructing a 60,000,000-gal. reservoir. The work involves about 60,000 cu. yds., of embankment and a concrete core wall; Gilbert C. White, Durham, N. C., and Charlotte, is Engr.

Kinston, N. C.—A water-works system will be constructed at the North Carolina School for Feeble-Minded. Dr. Ira M. Hardy, Kinston, is Secy.

Bainbridge, Ga.—The city has voted to issue $10,000 of bonds for the installation of a water-works system. Noted Dec. 14.

Douglas, Ga.—The city has voted in favor of issuing $15,000 of bonds for the installation of water-works and an electric light plant.

Macon, Ga.—Bids will be received until Jan. 25 by the Water Commissioners for c.-i. pipe for watermain extensions to newly annexed territory. Estimated cost, $80,000.

McDonough, Ga.—The city has voted $22,000 of bonds for the installation of a water-works system. Noted March 23 and Dec. 14.

Unadilla, Ga.—Bids will be received by the Mayor and City Council until 3 p. m., Dec. 30, for the construction of 1½ miles of 6 and 8-in. water mains with appurtenances, reinforced-concrete reservoir, etc. The J. B. McCrary Co., Empire Bldg., Atlanta, Ga., is Engr.

Jacksonville, Fla.—Bids will be received about Jan. 1 by the Board of Trustees for the Water-Works and Improvement Bonds for sinking an artesian well to a depth of 1,000 ft. and casing to a depth of 500 ft. to the water-bearing rock. R. N. Ellis is Supt. W.-Wks.

Fort Pierce, Fla.—The city has voted in favor of issuing $45,000 of bonds for the installation of a water-works system. Noted May 18.

Chatom, Ala.—The Washington County Commissioners are asking for bids for the erection of a steel tank and tower. Plans and specifications are on file at the office of D. J. Long, Judge of Probate.

Montgomery, Ala.—The City Commission Dec. 11 authorized improvements at the water-works plant to cost $20,000.

✚**Lorenauville, La.**—We are officially advised that the contract has been awarded to the GENERAL CONTRACT CO., New Orleans, La., for the construction of the water system, including the tank and tower. Bids were opened Dec. 15 by the Board of Aldermen.

Lexington, Tenn.—The Board of Mayor and Aldermen has sold bonds for $50,000 for the installation of water-works and electric lights. R. C. Houston, Memphis, Tenn., is Engr.

Covington, Ohio.—The city will lay 5,790 ft. of water mains in several streets. Robert Welling is Supt. W.-Wks.

Mishawaka, Ind.—E. F. Crabill, Supt. W.-Wks., is preparing plans for improvements to the water-works system. The improvement will require c.-i. pipe mains. Bids will be received after Jan. 1.

***Grand Rapids, Mich.**—Bids will be received by the Board of Water Commissioners until 8 p. m., Jan. 25, for constructing and erecting one 350 to 375-HP. water tube boiler for the combination pumping and lighting plant. Samuel A. Freshney is Secy. and Gen. Mgr.

Georgetown, Ill.—The city, we are officially advised, is considering the installation of a water-works system. Estimated cost, $10,000. No engineer has as yet been retained. H. O. Cook is City Clk.

✚**Tremont, Ill.**—The contract has been awarded to A. D. THOMPSON, Peoria, Ill., by the Board of Local Improvements for the construction of about 14,500 ft. of 4 to 8-in. c.-i. water mains with necessary appurtenances, at $8,327. Bids were opened Dec. 11. Melluish & Broyhill, Bloomington, Ill., are Engrs.

✚**Audubon, Iowa.**—The contract for completing the artesian well for the water-works has been awarded to the J. P. MILLER ARTESIAN WELL CO., Chicago, Ill. Bids were opened Dec. 7.

Independence, Kan.—The city is considering improvements to the water-works system to cost $99,000. C. L. Wint is Supt. W.-Wks.

Waterville, Kan.—Bids will be received by R. Smith, City Clk., until 7 p. m., Dec. 29, for furnishing all material and labor and constructing water-works and electric lighting systems. Bids will be received on different sections of the work as follows: Section 1, for furnishing f. o. b. cars Waterville, all pipe and special castings; Section 2, for furnishing f. o. b. cars Waterville, all valves and hydrants; Section 3, for furnishing all material and labor, excepting c.-i. pipe, valves, hydrants and pole line equipment for constructing the water and light distributing system; Section 4, for furnishing material and erecting complete power house, oil storage tank, machinery foundations, etc.; Section 4A, for furnishing all material and labor and constructing water supply well; Section 5, for furnishing f. o. b. cars Waterville, pumping machinery, etc.; Section 6, for furnishing and installing one 80-HP. oil engine or two 40-HP. oil engines; Section 7, for furnishing and erecting complete one 75,000-gallon steel tank on 50-ft. tower, including foundations; Section 8, for furnishing f. o. b. cars Waterville, all electrical machinery and all material and labor except poles for electric light distributing system; Section 9, for furnishing f. o. b. cars Waterville, all poles. Plans and specifications are on file at the offices of the City Clerk and Worley & Black, Engrs., Reliance Bldg., Kansas City, Mo. Noted April 20.

Billings, Mont.—The Board of County Commissioners, Billings, is considering the installation of a pumping plant below the rim near the Yellowstone River to pump water from the river through a filtering system and pipes to a large tank to be built in the ground adjoining the main building of the County Poor Farm. Preliminary surveys have been made by B. C. Lillis, County Surv.

✚**Independence, Mo.**—The Board of Commissioners of Jackson County has awarded the contract to the INTER-URBAN WATER CO., Independence, for the construction of a pipe line from Independence, Mo., to the County Farm. Bids were opened Nov. 24.

***Kansas City, Mo.**—Bids will be received by the Purchasing Agent of Kansas City, City Hall, until 2 p. m., Jan. 10, for cleaning about 18,000 ft. of 36-in. c.-i. pipe in accordance with the plans and specifications to be had from E. B. Harrington, Secy. Bd. Fire and Water Comrs. Date incorrectly noted under "Proposals Advertisements" as Jan. 13.

Bids will be received until Jan. 3 by the Board of Fire and Water Commissioners for furnishing the Water Department, f. o. b. cars Kansas City, all bronze, disc, standard gear water-meters, complete with brass couplings, as follows: 500 ⅝-in., 50 ¾-in.; also for extension dials.

Calvert, Tex.—The Calvert Water, Ice & Electric Light Co. has been granted a new 50-year franchise. Improvements to cost $14,000 will be made.

Dallas, Tex.—R. R. Nelms, Supt. W.-wks., has completed specifications for the new Fair Park Trinity well. The well will propbably be drilled to a depth of from 2,650 to 2,700 ft. Bids will be asked soon.

Pecos, Tex.—The pumping station of the Texas State Irrigation Experimental Farm, located about three miles from here, will be enlarged. H. C. Stewart is Supt.

Plainview, Tex.—Simmons, McCutcheon, Rudell & Kaufman, Des Moines, Iowa, who recently purchased 18,000 acres of land near here, are preparing to drill a number of wells and install pumping plants, as well as a central electric power station for irrigating purposes.

McAlester, Okla.—The city has voted $50,000 of bonds for laying an additional pipe line to Gaines Creek, and for additional water-works machinery. Noted Dec. 14. W. P. Halliday is City Engr.

Wray, Colo.—Bids will be received about Jan. 1 for the construction of a water-works system. Estimated cost, $35,000 to $60,000. Thomas S. Sheppard, Denver, Colo., is Engr. Noted Dec. 7.

✚**Alamosa, Colo.**—We are officially advised that the contract has been awarded to MARSHALL BROS. by the town for the construction of the water-works system. Estimated cost, $10,000.

Glenwood Springs, Colo.—The Carbondale Reservoir & Irrigation Co. has been incorporated to construct a reservoir in Spring Park to irrigate about 12,000 acres of land lying at the east side of the valley between Carbondale and Glenwood Springs. Jerome B. Stovall and Hare Holmes, Denver, Colo., are among the incorporators.

✚**Montrose, Colo.**—The contract has been awarded to the WESTERN STEEL HEADGATE CO., Fort Collins, Colo., by the U. S. Reclamation Service, Montrose, for furnishing and delivering f. o. b. shipping point six steel gates, 4 ft. wide by 6 ft. high, six hoists for same; eight steel gates 1 ft. 6 ins. wide by 4 ft. high. C. T. Pease is Project Engr., Montrose.

✚**Las Cruces, N. Mex.**—The city has awarded the contract for the construction of water-works and a sewerage system to BASH & GRAY, Joplin, Mo., at $54,953. Bids were opened Dec. 15.

Willard, N. Mex.—The pumping plant of the Atchison, Topeka & Santa Fe Ry. Co. situated here will be enlarged. W. J. Lank, Clovis, N. Mex., is Div. Engr.

Lewiston, Idaho.—The city is considering laying new water mains to cost $6,000.

Boise, Idaho.—Bids will be received until 2 p. m., Jan. 10, by the U. S. Reclamation Service, Boise, for furnishing four electric derrick hoists and four stiff-leg derricks for the Boise Irrigation Project, Idaho. F. W. Hanna, Boise, is Project Engr.

Prescott, Ariz.—A Water Users' Association has been formed here for the betterment of the water supply and relief from pumping charges in connection with the supply from Del Rio. It is proposed to sink a shaft within the city limits of Prescott to strike water developed by drilling heretofore. It is estimated that a supply of 60,000 gals. per day can be secured from this well.

Prosser, Wash.—Bids will be received about Jan. 1 by the city for constructing the water-works system. Estimated cost, $50,000. C. Waller, Prosser, is Engr.

Twisp, Wash.—Bids will be received by the town until Feb. 15 for the construction of the water-works system. Estimated cost, $12,000. Noted Nov. 2.

✚**Wapato, Wash.**—The contract has been awarded by the town to FAIRBANKS, MORSE & CO., Seattle, Wash., and Portland, Ore., for installing a pump-house, and reservoir for the water system at $7,497.

Brewster, Wash.—Plans are being considered by the Booster Club of Brewster for an irrigation district embracing 30,000 acres of land near here.

North Yakima, Wash.—The Secretary of the Interior, Washington, D. C., has authorized the Reclamation Service to construct by force account reinforced-concrete turnouts from the main canal, Sunnyside Unit, Yakima Irrigation Project, Wash., to supply the Rocky Ford and Euclid Laterals and Mabton Feeder Canal. Estimated cost, about $8,400. Ernest McCulloh is Project Engr., Sunnyside, Wash.

North Yakima, Wash.—The Secretary of the Interior, Washington, D. C., has authorized the Reclamation Service to construct a large number of small laterals and enlarge and extend parts of the existing system in order to complete the Sunnyside Unit of the Yakima Irrigation Project, Wash. The expenditures for this work are not to exceed $130,000. Certain portions of the work will be done by small contracts, but in a large measure its prosecution must be regulated by the operation of the present system, that is, by government forces.

Tacoma, Wash.—The Council is considering laying a 10-in. water main in Improvement District No. 583.

Portland, Ore.—We are officially advised that Louis C. Kelsey, Civil and Hydraulic Engr., Selling Bldg., Portland, Ore., has been employed by the Oregon State Board of Health to make preliminary surveys and investigations and to prepare a report and estimates of cost and results of constructing a gravity water system from Clear Lake in the Cascade Mountains to the state institutions at Eugene and Salem and for providing adquate water for the cities and towns from Eugene to Salem. This is preliminary to action by the Legislature and municipalities toward carrying out a gravity water supply project. If the project is carried out there will be required a main supply line of approximately 60 miles in length besides subsidiary lines of about 75 miles in length, together with distributing reservoirs and pipe distributing systems.

✚**Portland, Ore.**—The Water Board has awarded contracts as follows for furnishing and delivering c.-i. water pipe: To the OREGON IRON & STEEL CO., Sher'ock Bldg., Portland, 3,800 tons at $117,900; to the U. S. CAST IRON PIPE & FOUNDRY CO., 71 Broadway, New York, 8,200 tons at $265,270 and to SMITH & WATSON IRON WORKS, 412 Front St., Portland, 500 tons at $24,500. Bids were opened Dec. 12.

McMinnville, Ore.—See item under Light, Heat and Power Plants.

Turlock, Cal.—Bids will be received until 2 p. m., Jan. 8, by the Directors of the Turlock Irrigation District, Turlock, for the construction of a portion of the canal and works of the district. Anna Sorensen, Turlock, is Secy. Noted Dec. 7.

Los Angeles, Cal.—The North Lankershim Acres Water Co. has been incorporated and is preparing to extend the water mains in the entire Lankershim tract.

Bakersfield, Cal.—The Bakersfield Water Co. has purchaser the plant of the Sumner Water Co. About $100,000 will be expended for improvements, including new 10-in. c.-i. main, a new pumping station and electricity substituted for steam for pumping.

Brawley, Cal.—The City Trustees are considering the reconstruction of the irrigation system in a portion of the city.

✚**Exeter, Cal.**—We are officially advised that the contract has been awarded by the Board of Town Trustees to C. D. VINCENT, Oakland, Cal., for the construction of water-works here, at $31,592. Bids were opened Dec. 11. Noted Sept. 21.

Fort Mason (San Francisco post-office), **Cal.**—Bids for constructing two additional filters in the pumping station at the Presidio of San Francisco, Cal., were received by Col. George McK. Williamson, Q. M., U. S. A., Fort Mason, Dec. 15 as follows: (a) two steel filters, (b) two wooden filters, (c) two high-type steel filters, (d) two high-type wooden filters, (e) piping: C. F. Braun, & Co., 503 Market St., San Francisco, (a) $7,850, (b) $6,180, (c) $9,055, (d) $6,700, (e) $1,190; Pringle, Dunn & Co., 338 Pine St., San Francisco, (e) $1,286; Stevens & Stanbraugh, 947 Bush St., San Francisco, (e) $2,523; M. Sissenwine, 820 Merchant's Exchange, San Francisco, (a) $13,630, (b) $12,370.

Los Angeles, Cal.—The Board of Supervisors will receive bids until 2 p. m., Jan. 15 for a franchise granting the right to lay and for a period of 40 years to maintain a system of water pipes in certain portions of Los Angeles County. H. J. Lelande is County Clk.

San Francisco, Cal.—Marsden Manson, City Engr., has completed plans and specifications for the new pumping station to be erected on the Presidio Military reservation as a part of the city's salt water fire protection system. Separate bids will be asked for the general construction, the mechanical equipment and the structural steel work.

Niagara Falls, Ont.—The engineer of the Water-Works Commissioners has submitted a report in regard to deepening the water-works intake, and recommends that a connection be made between the Ontario Power Co.'s 18-ft. tube by laying a 12-in. main to connect with the electrical centrifugal pump for use in case of emergency and that a concrete division be built from the water works forebay to extend from a point near the outer end of the present circular flume, and rack at the intake. The removal of the present wooden flume and the construction of a concrete flume is advised.

St. Boniface, Man.—Plans have been prepared by M. P. Blair, City Engr., for the extension of water mains. Estimated cost, $185,000. The work will be done by day labor.

Medicine Hat, Alta.—The citizens Dec. 11 passed a by-law for $45,000 for the extension of the water-works system.

Saskatoon, Sask.—The citizens Dec. 11 passed by-laws for $214,000 for improvements, including a pumping plant.

SEWERAGE.

(**Denotes that this work is advertised in Engineering News.*)

Boston, Mass.—Bids will be received until Dec. 29 by the Department of Public Works for the construction of sewers in Canterbury St., West Roxbury District. Louis K. Rourke is Comr. Pub. Wks

✚**Troy, N. Y.**—The contract has been awarded by the Board of Contract and Supply to EVELINE BROS., Waterford, at $28,323, for constructing the Pawling Ave. and Thompson St. Intercepting sewer. Noted Dec. 21.

Watertown, N. Y.—The Board of Public Works is considering the extension of the western outfall sewer from Pine to Massey St. Estimated cost, $5,000. E. W. Sayles is City Engr.

Harrisburg, Pa.—Bids will be received until noon, Dec. 28, by W. W. Caldwell, Highway Comr., for constructing sewers in portions of Mulberry, Daisy, Summit and Honey Sts., and Mount Pleasant Alley.

Meadville, Pa.—The City Council is considering the construction of a sewage disposal plant. Estimated cost, $160,000.

Newark, N. J.—Bids will be received until 8 p. m., Dec. 20, by the Township Committee, National Bank Bldg., for constructing 1,380 lin. ft. of 10-in. and 4,930 lin. ft. of 8-in. vitrified tile pipe sewers, 22 manholes, and nine flush tanks. Plans and specifications are on file at the offices of Edmund R. Halsey, Township Engr., and Milton R. Sillance, Township Clk.

✚**Phillipsburg, N. J.**—We are officially advised that the contract for constructing a sewer in Thomas St. was awarded Dec. 20, to M. O. HAGAN, at $5,376. The other bids were: J. L. Wichheiser, $6,606; R. C. & C. D. Stewart Construction Co., $6,436; Phillipsburg Supply & Construction Co., $5,523; D. F. Kennedy is Chn. Sewer Com. Noted Dec. 14.

✚**Baltimore, Md.**—Bids for constructing sewers were received by the Board of Awards Dec. 20, and contracts have been awarded as follows: To the McDERMOTT CONTRACTING CO., Washington, D. C., Sanitary Sewer No. 81; to WM. McCARTHY & CO., 121 Pearl St., Baltimore, Sanitary Sewers Nos. 82, 76 and 18; to N. A. MIDDLETON, 515 Continental Bldg., Baltimore, Sanitary Sewer No. 17. The approximate quantities are as follows: 34,000 lin. ft. 8 to 24-in. vitrified pipe sewer, 1,800 lin. ft. 27-in. brick and concrete, or citrified pipe sewer, 31,500 lin. ft. house connections; storm water contract, 210 lin. ft. 69 x 36-in. rectangular drain, 6,850 lin. ft. 48 to 36-in. circular drain, 16,100 lin. ft. 24 to 15-in. circular drain, 8,500 lin. ft. inlet connections, 320 inlets, 140 manholes. Chas. England is Chn. Sewerage Com. Noted Dec. 7.

Lynchburg, Va.—The Board of Aldermen has adopted an ordinance providing for a bond issue of $550,000 for sewer construction and street improvements. Harry L. Shaner is City Engr.

Kinston, N. C.—A sewer and water-works system estimated to cost $7,000 will be constructed at the North Carolina School for Feeble-Minded. Dr. Ira M. Hardy is Secy.

Douglas, Ga.—Bonds for $10,000 have been voted for constructing sewers.

McDonough, Ga.—The City Council is considering the construction of a sewer system. Estimated cost, $18,000. A. M. Stewart is Mayor.

✚**Unadilla, Ga.**—We are officially advised that the contract for constructing a sewer and water system was awarded Dec. 20, to WALTON & WAGNER, at $22,825. The other bids were: Thrach & Boughon, $24,536; H. L. Bosler $24,848; A. J. Waxdrep, $25,527; M. P. Flynn & Co., $25,783; Sullivan, Long & Hogarty, $25,963; Dysord Construction Co., $28,508. The system includes five miles of sewers, 1½ miles of 6 and 8-in. water main with appurtenances, brick building, reinforced-concrete reservoir, 80-HP. boiler, pumping engine and air lift. The J. B. McCrary Co., Atlanta, is Consult. Engr. Noted Dec. 14.

Fort Pierce, Fla.—Bids will probably soon be asked for the construction of a sewer system. Bonds for $30,000 have been voted. R. Whyte is Mayor.

Mobile, Ala.—Bids will be received by the city until Jan. 5, for constructing 22,000 lin. ft. of from 6-in. to 6-ft. terra cotta and concrete storm sewers. Wright Smith is City Engr.

Vicksburg, Miss. — Bids will be received until noon, Jan. 1, by J. D. Laughlin, Chancery Clk., Warren County, for constructing sewers in the city Cemetery Road.

Cincinnati, Ohio.—Bids will be received until noon, Dec. 23, by the Director of Public Service, John J. Wenner, Clk., for constructing main and lateral sewers in McGregor St.

Cincinnati, Ohio.—Bids will be received until noon, Dec. 29, by the Director of Public Service, John J. Wenner, Clk., for constructing main and lateral sewers and drains in various streets. Plans, specifications and blank proposals may be obtained at the office of the Chief Engineer of the Department of Public Service.

Pleasant Ridge, Ohio.—Bids were received by H. B. Hayden, Village Clk., Dec. 16, for laying 62,746 lin. ft. of sewer pipe, 5,042 ft. of c.-i. pipe, and 451 ft. of lock bar pipe; 67,788 ft. of trenching and backfilling; 138 manholes, purification works, etc. The bids were as follows: W. McDowell & Son, Bellefontaine, Ohio., $118,150; John Snyder, 4436 Forest Ave., Norwood, Ohio., $116,347; McCarthy Bros., 2910 Woodburn Ave., Cincinnati, Ohio, $124,529; Thos. P. Starck, 1400 Myrtle Ave., Cincinnati, Ohio, $90,180; F. M. Benner & Co., Marion, Ind., $98,342. The Rigs & Sherman Co., The Nasby, Toledo, Ohio, are Consult. Engrs. Noted No. 23.

Sandusky, Ohio.—Plans have been prepared and submitted to the City Council for a sewer in the East End Cove. Estimated cost, $6,500.

✚**Springfield, Ohio.**—A contract for constructing sewers in three sections of Columbia St. has been awarded to M. J. COONEY, at $9,030.

Toledo, Ohio.—Bids will be received until noon, Jan. 5, by the Director of Public Service. F. G. Stockton, Secy., for constructing sewers in various streets. Plans and specifications are on file at the office of the Director.

Youngstown, Ohio.—Bids will be received until noon, Jan. 4, by the Director of Public Service, W. H. McMillin, Clk., for constructing sewers on Ridge Ave.

Columbus, Ind.—An ordinance has been passed providing for the construction of the Maple Grove sewer. Estimated cost, $40,000. The sewer will be 4¼ miles long, and will empty into White River. Bids will be asked soon.

Galesburg, Ill.—The Board of Local Improvements is considering the construction of a sewer in East Main St. Estimated cost, $18,000. F. M. Connelly is City Engr.

Ottumwa, Iowa.—Plans have been prepared by John T. Brady, City Engr., for extending the West End trunk sewer system. Estimated cost, $66,000.

Tipton, Iowa.—Resolutions have been passed providing for the construction of a sanitary sewer system to cost $64,000. Plans have been prepared by the Iowa Engineering Co., Clinton, Iowa.

Sioux City, Iowa.—K. C. Gaynor, City Engr., is preparing a map of the present storm water sewer system, and an estimate of the changes necessary.

Lawrence, Kan.—Bids will probably soon be asked for the construction of storm sewers. Estimated cost, $39,000.

Cameron, Mo.—Bids will be received until 8.30 p. m., Jan. 5, for constructing 12,280 ft. of 8-in. sewers, 36 manholes and three flush tanks. Plans and specifications are on file at the office of Clarence Staples, City Clk.

✚**St. Louis, Mo.**—We are officially advised that the contract for constructing sewers in Lindenwood Sewer District No. 1, was awarded Dec. 15, to JOHN F. McMAHON, Wainwright Bldg., St. Louis, at $19,820. The only other bid received was submitted by Harry F. Herman, at $23,180. Noted Dec. 14.

Sallisaw, Okla.—The Board of Town Trustees have retained Winters & Dove, Engrs., Fort Smith, Ark., to prepare plans and specifications for a sanitary sewer system and sewage disposal plant. Bonds for $45,000 have been sold and plans will be completed in about 60 days. Frederick W. Ahrens is Pres. Bd. of Town Trustees.

✚**Las Cruces, N. Mex.**—Bids for constructing a sewer and water system were received by the Board of Trustees Dec. 16, as follows: Fred. Dieter, $65,000; F. R. Stone, $56,437; BASH & GRAY, Joplin, Mo., $54,953 (awarded contract); D. B. Gordon, $65,262; G. Jaeger, American Light & Water Co., $61,654; Mayfield Shaw Construction Co. $57,692; E. M. Eby, $61,654; J. C. Huff, $77,537; Peter O'Brien Construction Co. $67,142; M. F. Dicus, $63,427; W. F. Plummer Co., $56,387; W. Jennings & Woods, $73,304; Hamilton Bros. Construction Co., $60,127; W. E. Anderson, $60,463; Central Construction Co., $60,-

✚**North Yakima, Wash.**—We are officially advised that the contract for constructing the main storm sewer was awarded, Dec. 18, to D. T. DANIELS, at $43,021. The other bids were: International Contract Co, $43,963; Jahn Construction Co., $45,920; Montague-O'Reilly Co., $51,444; Northwest Municipal Construction Co., $47,521; Beebe & Stephenson, $45,048; Jeffery & Buffton, $45,390; Robinson & Foster, $37,432 (thrown out); Travers & Co., $47,443. F. J. Sharkey is Asst. City Engr. Noted Dec. 14.
245; W. W. Cook & Son, $56,921.

Pasadena, Cal.—J. S. Van Donum, City Engr., has recommended the construction of sewers in various streets. Estimated cost, $9,093.

GARBAGE DISPOSAL.

(*✚Denotes a contract awarded.*)

New York, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, Jan. 5, for Contract No. 1,317, for furnishing carts, with horses and drivers, for disposing of street sweepings from piers and waterfront property in the Boroughs of Manhattan, The Bronx, Brooklyn and Queens.

Birmingham, Ala.—The City Commissioners are considering the construction of a garbage crematory.

New Iberia, La.—George G. Earl, New Orleans, La., has been retained to advise the city as to the best method of the disposal of garbage. J. S. Power is Mayor.

Youngstown, Ohio.—Bids will be received until Jan. 4 by the Director of Public Service for the disposal and reduction of garbage. W. H. McMillin is Clk.

STREETS AND ROADS.

(**Denotes that this work is advertised in Engineering News.*)

New York, N. Y.—Bids will be received by the President of the Borough of Manhattan, City Hall, until 11 a. m., Dec. 30, for improving various streets.

✚**Syracuse, N. Y.**—The contract for paving Victoria Place, between Allen and Westcott Sts., has been awarded to the WARNER-QUINLAN ASPHALT CO., at $6,035. Sheet asphalt and stone curbing are to be used. W. J. BURNS CO., was awarded contract for grading Teall Ave., at $6,551.

Jersey City, N. J.—Bids will be received until 2 p. m., Jan. 15, by the Board of Street and Water Commissioners, City Hall, for the repaving of Summit Ave., from Gardner to Jewett Aves.

Beachhaven, N. J.—See "Proposals."

✚**Ocean City, N. J.**—Contracts have been awarded by the Cape May County Board of Freeholders as follows: For building the New Ocean City Boulevard, to SUTTON & CORSON CO., Ocean City, at $94,258; for constructing the Sea Isle City road, to H. Y. CLOUTING, Beesle's Point, at $24,971, and for building the Woodbine-Marshallville road, at $13,976.

Baltimore, Md.—H. K. McKay, City Engr., states that the city will advertise for paving of 5 to 8 miles of streets about Jan. 1; 75% of this to be asphalt resurfacing over cobblestones, 1½-in. binder and 1½-in. topping; 15% vitrified block, paving on 4-in. concrete base; 10% Belgian block and 6-in. concrete base. It is proposed to let these contracts about Jan. 15. An additional 20 miles will be advertised early in January, 1912.

The Paving Commission, R. Keith Compton, Chn., has ordered the paving of seven additional streets: Lombard St., from Green to Fremont Ave.; McElderry St., from Northeastern Market to Milton Ave.; Milton Ave., from McElderry to Baltimore St.; Montford Ave., from McElderry St. to Baltimore St.; Collington Ave., from Orleans to Ashland Ave.; Valley St., from Hoffman to Chase St.; Sharp St., from Camden to Hill St. Plans are being prepared.

Bids have been received by the State Roads Commission for the section of the Baltimore-Washington Boulevard, from Beltsville to Contee, a distance of five miles. Bush, Mohler & Smith were the low bidders at $52,507.

Lynchburg, Va.—See item under Sewers.

✚**Louisville, Ky.**—The contract for paving Spratt St., from Goss Ave. to Ellison Ave., has been awarded by the Board of Public Works, to G. W. GOSNELL, at $1.80 per sq. yd. The total bid was $13,200.

Henry Bickel & Co., were the low bidders for the work of constructing the Southern Parkway from Castlewood to Shelby Sts., at $30,310. Other bids were as follows: J. H. Cahill, $34,597; Jefferson Construction Co., $50,998; Woodruff & Staebler, $32,925; F. H. Breslin & Co., $36,315. Plans are being made for the continuation of the parkway from Shelby St. to Third.

Mobile, Ala.—Bids will be received until noon, Jan. 5, by the Board of Commissioners for the following: Asphalt paving, 3,480 sq. yds., and 2,408 lin. ft. of granite curbing; wood block paving, 33,700 sq. yds., and 17,530 lin. ft. of granite curbing.

Shreveport, La.—See item under Miscellaneous Contracts; Rock or Gravel, Shreveport, La.

✚**Akron, Ohio.**—Contracts for paving have been awarded as follows: To pave York St., to McALANAN BROS., at $5,358; to pave Center St., to McDHAFFREY & SON., at $33,037; to pave Wise St., to WINDSOR BROS., $1,593.

The City Council has adopted a resolution declaring it necessary to improve Corson Ave., from Jefferson Ave., to Bloomfield Ave., and Bloomfield Ave., from Exchange St., to Portage Path, and Grand Ave., from Portage Path to Exchange St.

The City Council has decided to improve Turner St., from Lods St. to Glenwood Ave., by grading, curbing and paving.

Canal Dover, Ohio.—The plans for paving Wooster, Iron Tuscarawas, Factory, Second and Commercial Sts., have been approved and the work will be advertised in the near future.

✚**Cincinnati, Ohio.** — Contracts for paving have been awarded to HENKEL & SULLIVAN, 703 Mercantile Library Bldg., as follows: Improvement with asphalt of Hackberry St., between Madison Road and Dexter Ave., at $13,767, and the improvement with asphalt of Moorman Ave., from Clayton St. to Madison Road, at $6,035.

Cleveland, Ohio. — Bids will be received until noon, Jan. 16, by H. H Canfield, Village Clk., Cleveland Heights, 309 Beekman Bldg., Cleveland, for the improvement of Fairfax Road, from Fairmount to Wellington Road.

Bids will be received until 11 a. m., Jan. 17, by the Board of Commissioners of Cuyahoga County, for the improvement of Union Road, from the limits of the city of Cleveland to the intersection of Union and Kinsman Roads, in Newburg Township. John F. Goldenbogen is Clerk.

Delaware, Ohio.—A petition asking for the paving of Central St. with brick or wood block, a total of 5,000 sq. yds., has been granted by the City Council.

✚**Dayton, Ohio.**—Contracts for paving were awarded by the City Engineer as follows: Paving North Main St., to WARREN BROS., Boston, Mass.; improving Huffman Ave., to A. J. KAMMER; paving Burkhardt Ave., to E. M. GEPHART.

Euclid, Ohio.—Bids will be received until noon, Jan. 8, by Village Clerk Fred H. Shoaff, for the improvement of the Rake Road, from the center line of Gardner Road to the east line of the village.

Fostoria, Ohio. — Resolutions have been adopted by the City Council declaring it necessary to improve Seneca Ave., from Columbus Ave. to Springville Ave.; High St., from Union to Main St., and Poplar and High Sts.

Oberlin, Ohio. — The City Council has adopted a resolution declaring it necessary to pave Forest and Pleasant Sts.

Youngstown, Ohio.—Bids will be received until noon, Jan. 4, by the Director of Public Service for the grading of Plum St., between Marshall and High Sts.

Indianapolis, Ind.—Bids will be received until Jan. 25 by the Commissioners of Marion and Hendricks Counties for the construction of a road between the two counties. It will be about two miles long, and the estimated cost is $8,500.

Indiana Road Improvements.

Bids will be received as follows for highway Improvement in Indiana:

Jan. 3.

Lafayette, by the Commissioners of Tippecanoe County, until 10 a. m., for the construction of three and one-quarter miles of gravel road in Washington Township, and three miles of gravel road in Fairfield Township. George W. Baxter is Audr.

Jan. 20.

Terre Haute, by the Commissioners of Parke and Vigo Counties, until 11 a. m., for the construction of two gravel county line roads. Nathan G. Wallace is Audr.

Jan. 31.

Bluffton, by the Commissioners of Huntington and Wells Counties, until 10 a. m., for the construction of a county line gravel road. O. D. Garrett is Audr.

Kalamazoo, Mich.—H. A. Johnston, Engr., will receive bids about the last of January for paving with brick and macadam in Kalamazoo. The estimated cost is $80,000.

Kenosha, Wis.—Bids will be received until Jan. 5 by August Baltzer, City Engr., for the paving of various streets with 8,000 yds. of vitrified brick, concrete foundation, sandstone curb and asphalt filler. The estimated cost is $17,000.

Lewiston, Mont.—It is reported that this city will begin paving the business district in the near future. W. M. McClean, City Engr., has so far prepared plans which provide for fourteen blocks.

✚Jefferson City, Mo.—The contract for the construction of Jackson St., between McCarty and Dankind Sts., has been awarded to JOSEPH POPE, at $7,614.

Dallas, Tex.—The city has decided that Main St., east and west of the Texas & Pacific crossing is to be widened from 35 ft. to 60 ft. west of the crossing and 80 ft. east of the crossing. J. M. Preston is City Engr.

Hillsboro, Tex.—An ordinance has been passed by the City Council providing for the paving of certain streets and also the public square.

Lufkin, Tex.—It is reported that this city is contemplating the expenditure of $200,000 for improved highways in the spring.

McMinnville, Ore.—See item under Light and Power Plants.

✚Portland, Ore.—The City Council has voted to award contracts for the hard surfacing of Sandy Boulevard, from East 28th St. to East 72d St., to the OREGON INDEPENDENT PAVING CO., at $192,000. Thomas M. Hurlburt is City Engr.

Los Angeles, Cal.—Bids for the grading and construction of an oil macadam pavement on Colorado St. have been received as follows: Geo. A. Rogers, $17,148 for the work complete, and S. M. Kerns, $12,900.

Los Angeles, Cal.—The County Board of Supervisors has completed the formation of a road improvement district taking in El Monte and the surrounding territory.

Pasadena, Cal.—Clarence P. Day, Boston Bldg., is completing plans and specifications and will receive bids at once for one-half mile of street work in a tract near Belvidere and Molino Aves. owned by a syndicate. The work will consist of grading, crushed rock and oiling, cement curbs and gutters, and either oiled macadam or cement sidewalks.

Redwood City, Cal.—Bids will be received until 10 a. m., Jan. 2, by the Board of Supervisors for the construction of a reinforced concrete culvert, at the junction of Woodside and the main county roads. Joseph H. Nash is Clk.

New York, N. Y.—Bids will be received until 11 a. m., Jan. 3, by the President of the Borough of Brooklyn, Borough Hall, for improving various streets.

INDUSTRIAL WORKS.

(*✚Denotes a contract awarded.*)

✚Cambridge, Mass.—The contract for the addition to the factory of Whittemore Bros. & Co., on Albany St., has been awarded to J. B. BYRNE, INC., 162 Sidney St. To be of brick, four stories and to cost $35,000. Densmore & Le Clear, 88 Broad St., Boston, are the Archs.

Holyoke, Mass.—A mill will be built on Dwight St. by the Prentess Wire Mills Co.

Worcester, Mass.—Additions will be made to the factory of the N. E. Corset Co., on Greene St. John P. Kingston, Knowles Bldg., is the Arch.

Buffalo, N. Y.—The Buffalo Natural Gas Fuel Co. will build a storage and repair plant, including machine shop, at Genesee, Monroe and Brown Sts. The cost will be about $75,000.

New York, N. Y.—Plans are being completed by John J. Lawlor, Arch., 360 West 23d St., for the construction of a 9-story brick cold storage warehouse at West 39th St. The cost is about $300,000. Joseph Stearn & Son, West 40th St., are owners.

Paterson, N. J.—The Steel Button Mfg. Co. will build a plant in Paterson. The cost will be about $20,000.

Lancaster, Pa.—The Lancaster Sanitary Milk Co., 40 West Chestnut St., has purchased property on Market St. and will construct a plant.

✚Pittsburgh, Pa.—The Pittsburgh Brewing Co. has awarded a contract to J. BORN, of Pittsburgh, at $15,000 for a brick storage plant in Ammon St.

✚Pittsburgh, Pa.—The contract has been awarded to D. T. REFFLE for the T. J. Keenan factory building on Forbes St., near Magee St. The cost will be about $55,000.

Baltimore, Md.—Henry Sonneborn & Co. will build an addition to their plant at Paca & Pratt Sts.

Baltimore, Md.—The Williams & Wilkens Co., York Rd. and 25th St., have purchased a site at Guilford Ave. and Chase St. Architect will be selected soon.

A plant probably will be built by Patrick Flanigan & Sons, paving contractors, 120 East Lexington St. The plant will have a capacity of 3,000 sq. yds. of asphalt a day.

Savannah, Ga.—The Phosphate Mining Co., Savannah, will soon erect a plant, with a daily capacity of 50,000 tons acid phosphate. The cost will be about $300,000.

Bridgeport, Ohio.—The main building of the Aetna-Standard mill of the American Sheet & Tinplate Co., of Pittsburgh, has been condemned by the company as unsafe. The structure will be razed and rebuilt at a cost of $200,000.

Lima, Ohio.—Plans are being prepared by the White Mountain Creamery Co., New Bremen, Ohio, for a creamery plant to cost $50,000.

Lorain, Ohio.—The Lorain Laundry Co., 20th St., Lorain, will build a dry cleaning plant. The cost will be about $10,000.

Brookville, Ind.—The Tompson & Torrin Co. will ask for bids for the construction of a paper mill on the site of the mill recently burned as soon as plans can be made and insurance adjusted.

Connersville, Ind.—The Connersville Ice Co. has purchased a site on Market and Court Sts. on which to build a large brick ice cream factory. Bids will be in order as soon as plans can be prepared.

Daleville, Ind.—The Daleville Canning Co., recently incorporated, will build a large canning factory at this place.

Gary, Ind.—The Fairweight Scales Co. has secured a site of the Gary Land Co. on which to build a large factory. Bids will be asked for as soon as the plans are completed.

Muncie, Ind.—Thomas W. Warner, owner of the Warner Auto Parts Co., at Toledo, is preparing to erect a large factory here. The new plant will employ about 1,000 men.

South Bend, Ind.—Bids will be received by the Colfax Mfg. Co. for the erection of a new three-story factory building on South Main St., adjacent to the Vandalia R. R.

Ann Arbor, Mich.—The Ann Arbor R. R. is having plans prepared by J. K. Haward, Engr., Owosso, Mich., for a round house.

Battle Creek, Mich.—R. A. Le Roy, 122 Pratt Bldg., Kalamazoo, has received bids for the one-story factory for the Goodale Co., 514 North Church St., Kalamazoo. All bids were rejected; will be refigured in spring.

Detroit, Mich.—R. E. Raseman, 1302 Penobscot Bldg., Detroit, is preparing plans for a new 2-story factory for the Calvert Lithographing Co., Grand River Ave. and Elizabeth St., Detroit.

Varney & Varney, Archs., 318 Palmer Bldg., Detroit, are preparing plans for a 1-story factory for the Detroit Concrete Receptacle Co. The cost will be about $20,500.

The Michigan Stamping Co. is having plans prepared for a 3-story factory building. The cost will be about $28,000.

The Hayes Mfg. Co. is having plans prepared for a factory and dry kiln. The cost will be about $25,000.

✚The Cudahy Bros., of Milwaukee, Wis., have awarded the general contract for their 2-story packing house in Detroit to MAX PARTHOLOMAE, 266 Warren Ave., Detroit. The cost will be about $20,000.

✚The Massachusetts Laundry Co. has awarded the general contract to OTTO MISCH, 72 Home Bank Bldg., Detroit. The cost wil be about $22,000.

✚The Grasselle Chemical Co., Cleveland, has awarded the general contract for the 1-story factory to MAX BARTHOLOMAE, 266 Warren Ave. Cost, about $22,000.

✚The Board of Public Works has awarded the contract for the proposed creosoting plant to the POWER & MINING MACHINE CO., 101 City Hall, Detroit, at $22,927.

Grand Rapids, Mich.—The Wolverine Brass Works will double the capacity of their plant. H. C. Cornelius, 252 Canal St., Grand Rapids, is Gen. Mgr.

Milwaukee, Wis.—Plans are being prepared by the Allyn Engineering Co., Consult. Engr., Cincinnati, Ohio, for several buildings, including an office building, 234 x 500 ft., main shop, machine shop and power building for the Milwaukee Corrugating Co., of Milwaukee. Most of these buildings are to be of steel frame, requiring approximately 800 tons of structural steel.

Kirchhoff & Rose, Archs., Majestic Bldg., Milwaukee, are preparing plans for a factory building to be erected at Clinton and Oregon Sts. Owner's name withheld. The building will be 80 x 100 ft., and will be one story. The cost will be about $60,000.

Austin, Tex.—The State Prison Commission has decided to re-erect the furniture factory, machine shop, blacksmith shop and repair shop at the state penitentiary at Huntsville which were recently destroyed by fire. The loss was about $150,000. Governor O. B. Colquitt is acting with the Prison Commissioners in the matter.

Post City, Tex.—C. W. Post, Battle Creek, Mich., will build a 10,000-spindle and 200-loom mill. The cost will be about $400,000.

Remlig, Tex.—The Pineland Naval Stores Co. has been formed here with a capital stock of $40,000 for the purpose of installing a turpentine and rosin plant.

Temple, Tex.—J. C. Lankford and B. Martin, Terrell, Tex., who recently leased the Central Iron Works plant at this place will install new machinery and make enlargements.

The Commercial Club is promoting the establishment of a hat factory here.

Pueblo, Colo.—Plans are being prepared for establishing a large wallpaper factory by the Fairfax Bros. of Geneva, N. Y. The cost will be about $150,000.

Roswell, N. Mex.—James Stoops, of Dayton, Ohio, contemplates installing a canning factory here at a cost of about $75,000. It will be devoted to canning corn, tomatoes, beets, beans and other products.

Ogden, Idaho.—A factory will be built by the Amalgamated Sugar Co. in southern Idaho. The factory will have a capacity of 500 tons of beets daily.

✚Calwa, Cal.—The Atchison, Topeka & Santa Fe Ry. has awarded the contract to the SHARP & FELLOWS CONTRACTING CO., Los Angeles, for a reinforced-concrete roundhouse at Calwa Riverbank.

✚Los Angeles, Cal.—The contract has been awarded to C. A. FELLOWS, Central Bldg., Los Angeles, for building a reinforced-concrete roundhouse for the Santa Fe Ry. Co. The cost will be $65,000.

Bids will be received until Jan. 15 by the County Board of Supervisors for installing a refrigerating system in the county hospital.

Ontario, Cal.—Articles of incorporation of the Ontario Planing Mill & Mfg. Co. have been filed here. The concern is capitalized at $25,000. The incorporators are W. W. Hodgkins, N. A. Godsave and E. A. Morey, all of Ontario. A mill will be built on West State St.

St. John, N. B.—P. M. Block, of Portland, Me., will establish a factory for the production of blockite. The plant will have a capacity of 3,000 bbls. daily.

Colima, Mex.—The State Legislature here has granted a concession to Jose Rico for the establishment of a starch factory.

MISCELLANEOUS CONTRACTS.

(**Denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

✚Repairing Fender Guards.—Boston, Mass.—The contract for repairing floor and fender guards at North End Beach has been awarded by the Park Department to RICHARD GIBSON.

***Dredging.**—Boston, Mass.—Bids will be received until noon, Jan. 22, by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Boston, for dredging in Weymouth, Back River, Mass.

Improvements to Beach.—Newport, R. I.—The citizens have voted to issue $30,000 of bonds for improvements to the beach. F. N. Fullerton is City Clk.

✚Barge Canal.—Albany, N. Y.—Bids were received as follows Dec. 20 by Charles E. Tremen, Supt. Pub. Wks., Albany, for Contract H, for improving the Cayuga and Seneca Canal by excavating a channel in Cayuga Lake Inlet at Ithaca, from a point about 300 ft. north of Cascadilla St. to deep water in Cayuga Lake, a length of 1.71 miles: E. M. Graves, Cleveland, Ohio, $220,034; Crowell-Sherman-Stalter Co., Cleveland, Ohio, $198,457; JAMES H. DAWES, 112 North Broad St., Philadelphia, Pa., $179,769 (awarded contract); engineer's estimate, $178,237. See also item under Bridges.

Barge Canal.—Albany, N. Y.—Bids will be received by Charles E. Treman, Supt. Pub. Wks., until noon, Jan. 17, for Barge Canal Contract No. 5-A, providing for the construction of the canal and its appurtenances from Station 5,074 near Mosquito Point Bridge over the Seneca River to Station 5,202 + 62.89, near Fox Ridge. Length, 2.44 miles. Engineer's estimate, $395,285.

Steel Work.—Fort Lafayette, N. Y.—Bids were received as follows, Dec. 23, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a steel concrete floor and iron balcony, U. S. Naval Magazine, Fort Lafayette: James Coreoleo, Brooklyn, N. Y., $14,770; Daniel J. Ryan, Brooklyn, $12,136; William G. Broadhurst, Hackensack, N. J., $10,800; Hamilton & Chambers, 29 Broadway, New York, $17,078; Grant Rohrer, 299 Broadway, New York, $17,988; E. G. Marshall, 38 Park Row, New York, $10,240; Snare & Triest Co., 143 Liberty St., New York, $12,780.

Excavation.—Fort Edward, N. Y.—Bids are being received by Albert G. Nelson, contractor, Bedford Hill, N. Y., for 50,000 cu. yds. of rock and 50,000 cu. yds. of earth excavation on the Barge Canal at Fort Edward.

Dredging.—New York, N. Y.—Bids were received as follows, Dec. 15, by Col. W. M. Black, Corps Engrs., U. S. A., New York, for dredging and rock removal in Westchester Creek, N. Y.: (a) for all material, except broken rock and bowlders one-half cubic yard in size or larger, and ledge rock, per cu. yd., scow measurement; (b) for ledge rock and broken rock and bowlders exceeding two cubic yards in size, per cu. yd., ledge rock to be measured in place, and broken rock and bowlders to be solid measurement; (c) for broken rock and bowlders one-half cubic yard to two cubic yards in size, per cu. yd., solid measurement: John A. Seely, 30 Church St., New York, (a) 38 cts., (b) $10, (c) $9.50; Maritime Dredging Co., 78 Broad St., New York, (a) 35.8 cts., (b) $8.75, (c) $8.

Metal Furniture.—New York, N. Y.—Bids will be received by Maurice E. Connolly, Pres. Boro. Queens, until 11 a. m., Jan. 8, for additional metal furniture and fittings for Queens County court-house, Long Island City, Boro. Queens.

Campus Improvements.—Syracuse, N. Y.—The Chamber of Commerce has recommended that the city issue bonds for from $77,000 to $88,000 for improvements to the campus of Syracuse University. Donald Dey is Chm. on Campus Improvements.

Pier.—Atlantic City, N. J.—Contracts will probably be let soon for the construction of a steel and concrete pier at New Jersey Ave., Atlantic City, for George H. Earle, Jr., Philadelphia, Pa., and Capt. John L. Young, Atlantic City. Plans for the structure have been prepared by Howard A. Stout, Arch., Atlantic City. Estimated cost, $650,000.

Fire Station.—Newark, N. J.—Bids were received Dec. 18 by the Council Committee on Public Buildings for the construction of a central fire station in Academy St. The W. H. Connolly Co., 136 South Seventh St., Newark, N. J., submitted the lowest bid at $47,684.

✚Fire Apparatus.—Philadelphia, Pa.—The city has awarded contracts for five horse-drawn steam fire engines to the AMERICAN LA FRANCE ENGINE CO., at $27,148.

Coal Trestles.—Baltimore, Md.—The Philadelphia, Baltimore & Washington R. R. Co., Gamble Latrobe, Gen. Agt., Union Station, will, it is reported, construct coal trestles and bunkers at the foot of Lanvale St. and Lafayette Ave.

✚Coal Tipple, Etc.—Baltimore, Md.—F. L. Stuart, Ch. Engr., Baltimore & Ohio R. R. Co., has awarded a contract to M. D. WELLS, Philadelphia, Pa., for constructing a coal tippie, sandhouse, ashpit, storeroom and oil house for the company at $90,000.

✚Dredging. — Norfolk, Va.—Henry Steers, New York, general contractor for the construction of the proposed union rail and water terminal for the Old Dominion Terminal Co., on the South Ghent water front, here, has awarded a sub-contract for the dredging to the MORRIS & CUMMINGS DREDGING CO., New York. About 1,000,000 cu. yds. of dredging will be required.

Breakwater—.Portsmouth, Va.—The Lynhaven Terminal Corporation will improve Lynhaven Bay and the lower Chesapeake Bay by constructing breakwater, etc., in order to create and maintain a harbor and navigable channel at that location.

Boats.—Wheeling, W. Va.—Bids will be received by Maj. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, until 11 a. m., Jan. 8, for furnishing and delivering two service boats, one each for Locks Nos. 5 and 8, Kanawha River, W. Va.

Oil Station.—Columbia, S. C.—The Texas Co., Houston, Tex., will build an oil distributing station here. Estimated cost, $25,000. P. J. Vosse is the local representative of the company.

Removing Wreck.—Jacksonville, Fla.—Bids will be received until noon, Jan. 19, by Capt. J. R. Slattery, Corps Engrs., U. S. A., Jacksonville, for removing wreck of the dredge, "Hester," in channel from Clearwater Harbor to Tampa Bay, Fla.

✚Repairs to Conveyors.—Key West, Fla.—The contract for repairs to two conveyors at coal shed "A" at the Naval Station, Key West, has been awarded by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., to the BROWN HOISTING MACHINERY CO., Cleveland, Ohio, at $18,000. Bids were opened Dec. 2. List of bidders noted Dec. 7.

✚Canal.—Tallahassee, Fla.—The Trustees of the Internal Improvement Board of Florida has awarded the contract to the MIAMI ENGINEERING CO. for canal construction from Lake Okechobee to Lake Worth. J. O. Wright, Tallahassee, is Ch. Drainage Engr. Noted Nov. 16.

✚Lead Pipe.—New Orleans, La.—The Sewerage and Water Board awarded the contract Dec. 16 to the NATIONAL LEAD CO., St. Louis, Mo., for furnishing 500,000 lbs. of lead pipe, at $24,850 and 15,000 lbs. of solder at $3,075. The bids submitted for pig lead were informal and new bids will be asked under revised specifications. George G. Earl is Supt. Sewer and W-Wks.

Lock Gates.—New Orleans, La.—Bids will be received until 11 a. m., Jan. 24, by Lt.-Col. Lansing H. Beach, Corps Engrs., U. S. A., New Orleans, for constructing lock gates in inland waterway between Vermilion Bay and White Lake.

Hard Rock or Gravel.—Shreveport, La.—Bids are being asked by Caddo Parish for furnishing either in pit or quarry or on board cars from 50,000 to 60,000 tons of hard rock or gravel suitable for surfacing roads, to be delivered by next April. T. T. Bellen, Shreveport, is Parish Engr.

***Boat.—Mobile, Ala.**—Bids will be received until 11 a. m., Jan. 22, by Maj. C. A. F. Flagler, Corps Engrs., U. S. A., Mobile, for the construction of the 80-ft. twin-screw motor survey boat, "Dauphin."

***Snagging Plant.**—Cincinnati, Ohio.—Bids will be received until 2 p. m., Jan. 30, by Maj. H. Jervey, Corps Engrs., U. S. A., Cincinnati, for constructing and

delivering the steel or steel and iron hull light draft snagging plant, consisting of the derrick boat "Mingo" and the tow-boat "Iroquois."

Ditch.—Fremont, Ohio.—Bids will be received until March 25 by the Board of County Commissioners for the construction of three sections of the Pickerel Creek Ditch. Estimated cost, $19,000.

Park.—Connersville, Ind.—The city has been given land to be improved into a public park. The work will be let to a landscape artist.

Ditch.—Decatur, Ind.—Bids will be received until Jan. 3 by Ralph W. Gentner, Decatur, Supt. of Drainage, for constructing Bendelier Ditch, Adams Township, Adams County.

Monument.—Washington, Ind.—The Daviess County Council has appropriated $30,000 for the erection of a monument to the memory of the civil war veterans of Daviess County. The shaft will be constructed in the court-house yard.

Levee Work.—East St. Louis, Ill.—The Illinois Dredging & Contracting Co., Dec. 22, sublet to the KINSEY CONSTRUCTION CO., Chicago, Ill., the contract for doing the filling, dredging and mattress work in connection with the building of the levee at East St. Louis, at $880,000.

+Channel. — Bedford, Iowa. — Bids were received as follows, Dec. 20, by the Board of Taylor County Commissioners for the construction of a new channel in the West One Hundred and Two River, requiring about 305,000 cu. yds.: Forrestal & Downey, 7.45 cts. per cu. yd.; Horton & Mosely, 7.84 cts.; Chapman Bros., 8.50 cts.; O. P. Herrick, 6.88 cts.; C. H. Sternburg, 7.94 cts.; CHARLES R. LEWIS, 6.875 cts. (awarded contract).

Drain.—Clarion, Iowa.—Bids will be received until Jan. 3 by E. M. Callender, County Audr., Clarion, for constructing Drain No. 70 in Lake and Liberty Townships. The main drain, including Sections 1 to 6, requires 13,300 ft. of 12, 14, 18, 20, 22 and 24-in. No. 1 salt-glazed vitrified farm drain tile. The lateral ditch, Sections 7 to 10 inclusive, 3,010 ft. of 12, 14, 16 and 18-in. tile; six 8-in. catchbasins made of sewer pipe with c.-i. grating.

+Drainage Ditch.—Logan, Iowa.—Bids were received Dec. 19 by the county for the Soldier River drainage work. The main ditch will require 665,000 cu. yds. of excavation; Spooner Ditch, 103,000 cu. yds.; East Soldier Ditch, 74,000 cu. yds.; West Soldier Ditch, 34,000 cu. yds.; Nelson Ditch, 14,000 cu. yds.; Burcham Ditch, 44,000 cu. yds., and Pratt Lake, 17,000 cu. yds. The contract has been awarded to F. M. CRANE, Council Bluffs, Iowa, at $64,000.

Drain.—Nevada, Iowa.—Bids will be received until Jan. 3 by C. A. Batman, County Audr., Nevada, for constructing Drain No. 32. The work will require 93,000 cu. yds. of open work; 63,473 ft. of 36 to 8-in. tile, 42.7 cu. yds. concrete masonry. Bids will be received on both clay and cement tile .

+Ditch.—Newton, Iowa.—The contract for constructing South Skunk River Ditch has been awarded by H. S. Rayburn, County Audr., to the LANA CONSTRUCTION CO., Harlan, Iowa, at 5½ cts. per cu. yd. The work involves about 1,500,000 cu. yds. of excavation. Nineteen bids were received for the work. W. F. Byers, Newton, is Engr.

Improving Wall.—St. Paul, Minn.—The Park Committee has approved an estimate of cost of $43,000 for the improvement of the wall from Hennepin Ave. to Lake Calhoun.

+Ditch.—Willmar, Minn.—The contract for constructing Ditch No. 31 has been awarded by the county as follows: To J. R. OLSON and CHARLES SUTCLIFF, 1618 Fourth Ave., Minneapolis, Minn., for open work, and to HENRY WELZEIN, Dows, Iowa, for tile work. Estimated cost, $71,538. Bids were opened Dec. 12.

Railroad Grade.—Poplar Bluff, Mo.—Bids will be received until 3.30 p. m., Jan. 20, by the Butler County R. R., Poplar Bluff, for the construction of about 180,000 yds. of railroad grade. The proposed work consists of building about nine miles of railroad grade southeast from Poplar Bluff. The work is divided in two parts for the convenience of contractors. The first, 7¾ miles, containing 165,873 yds. of fill and 836 yds. of cut, is suitable work for a dipper dredge or drag line scraper. The last 1¼ miles, consisting of 16,796 yds. of fill and 18,266 yds. of cut, is adapted to either teams or drag line excavation. Bids will be accepted for the entire contract or for either division. A profile and plat of the proposed work will be sent, postpaid, on receipt of 50 cts., and a copy of specifications will be furnished for 50 cts. by the Morgan Engineering Co., Goodwyn Institute Bldg., Memphis, Tenn., Engrs.

+Drainage Canals.—Harrisburg, Ark.—The contract has been awarded to R. H. McWILLIAMS, Chicago, Ill., and Walnut, Ill., by the Bayou De View Drainage District No. 5 for constructing drainage canals at about $200,000. It is estimated that 1,600,000 cu. yds. of earth will be removed.

Drainage System.—Helena, Ark.—The Commissioners of Beaver Bayou Drainage District has approved the survey made by C. R. Bailey, Engr., for the construction of a drainage system of from 50,000 to 60,000 acres. Estimated cost, $150,000. W. White is Secy.

Excavation.—Osceola, Ark.—Bids will be received until 10 a. m., Jan. 25, by Drainage District No. 9, Mississippi County, Osceola, for about 14,000,000 cu. yds. of earth excavation, 17 wooden bridges, one concrete spillway and one pile and timber spillway. Bids will be received for the work as a whole or for any part. The excavation work is divided into 16 contracts, to be offered separately to bidders, 15 of these being suitable for dipper dredges and the sixteenth being suitable for a dry land machine or teams and scrapers. The ditches vary from 14 to 50 ft. on the bottom and from 8½ to 14 ft. deep. Full information and specifications will be furnished upon application to the Morgan Engineering Co., Goodwyn Institute Bldg., Memphis, Tenn., Engrs.

Levee.—Texarkana, Ark.—Bids are being asked for about 2,000,000 cu. yds. of levee near here, mostly piece work, 5 to 12 ft. high. Information may be obtained from R. L. Cheshire, Huggins House, Texarkana; Lowrance Bros. Co., and R. L. Leonard, Memphis, Tenn.; or S. M. Bush, Camden, Ark.

Lock and Dam.—Dallas, Tex.—Plans are being prepared by T. H. Jackson, Corps Engrs., U. S. A., Dallas, for Lock and Dam No. 7, about 49 miles below Dallas in the Trinity River.

Causeway.—Galveston, Tex.—The A. M. Blodgett Construction Co. has withdrawn from its contract, it is reported, for constructing the Galveston Causeway. The work will be finished by the County of Galveston.

+Drainage Work.—Chandler, Okla.—Bids were received Dec. 20 by H. J. Wilkins, Engr., Deep Fork Drainage District No. 1, Lincoln County, at Chandler, for drainage work in the district. The work will require 7,327,447 cu. yds. of excavation. The main canal will be about 40 miles long, 40 to 65-ft. base, with 13 to 15-ft. cut; the laterals will approximate eight miles, with 20-ft. base and 10-ft. average cut. The contract has been awarded to the SPRANKLE CO., the only bidder, at 6.9 cts. per cu. yd., or about $505,000.

Bath-house.—Guthrie, Okla.—Bonds for the construction of the proposed bath-house have been sold. Bids will not be received for about 60 days. E. H. Winslow is City Clk. Noted Dec. 14.

Iron Posts.—Ottawa, Ont.—Bids will be received by P. G. Keyes, Secy., Dept. of the Interior, until noon, Jan. 31, for furnishing iron posts for use on the survey of Dominion Lands to be delivered as follows: At Winnipeg, 5,000 small and 150 large posts; Edmonton, 150 large posts.

Hoists and Derricks.—Boise, Idaho.—See item under Water Supply—Irrigation.

Dock.—Tacoma, Wash.—Plans have been submitted by W. C. Raleigh, City Engr., to the City Council for the construction of a 6-story municipal dock.

Bulkhead. — Bellingham, Wash. — Plans prepared by the engineers of the Bellingham Bay Improvement Co., Bellingham, for bulkheading and filling in

LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
12-30	Roof trusses, Washington, D. C. (S)	12-14
12-30	Ditches, Memphis, Tenn. (S.)	12-14
1- 6	Sewer, Newport, R. I. (S)	12-14
1-11	Rock excavation, Gloucester, Mass. (S.)	12-21
1-13	Generator sets, etc., N.Y. (S.)	12-21
1-13	Compressed air mains, New York (S.)	12-21

Light, Heat and Power Plants.

Bids close.		Noted in issue of
12-29	Lighting and supplies, New York, N. Y.	12-21
12-29*	Electric clock, Long Branch, N. J.	12-28
12-29	Gas regulators, New York, N. Y.	12-28
1- 2	Electrical equipment, Alameda, Cal.	12-28
1- 2	Wiring and fixtures, New York, N. Y.	12-28
1- 2	Electrical equipment, New York, N. Y.	12-28
1- 2	Turbine engine, Anderson, Ind.	12-14
1- 3	Wiring, Placerville, Cal.	11-30
1- 3	Heating system, New York, N. Y.	12-28
1- 4	Wiring and fixtures, Jacksonville, Fla.	12-28
1- 4	Heating and electric wiring, New York, N. Y.	12-21
1- 8	Electricity, Roseville, Cal.	12-28
1- 9	Electric-light improvements, Corydon, Iowa	12-28
1-13	Generator sets, New York	12-21
1-15	Steam line, Los Angeles, Cal.	12-28
1-22	Power plant, Washington, Ga.	12-28
1-25	Boiler, Grand Rapids, Mich.	12-28

Bridges.

Bids close.		Noted in issue of
12-27	Bridge, Jacksonville, Fla.	12-28
12-29	Bridge, Salt Lake City, Utah.	12-21
12-30	Bridge, Dayton, Ohio	12-28
12-30	Bridge work, Roseburg, Ore.	12-28
1- 1	Bridges, Amherst, Va.	12-21
1- 2	Bridge, Port Angeles, Wash.	12-28
1- 3	Bridge, Goldsboro, N. C.	11-30
1- 3	Bridge work, Havana, Ill.	12-21
1- 4	Bridge work, Preston, Iowa.	11-23
1- 4	Bridges, New Hampton, Ia.	12-14
1- 8	Bridge, Sunnyside, Wash.	12-28
1- 8	Bridge, Los Angeles, Cal.	12-28
1- 9*	Bridge, Bristol, Pa.	12-28
1- 9	Bridges, York, Neb.	12-28
1- 9	Bridges, Merced, Cal.	12-21
1-15	Viaduct, Atlanta, Ga.	11-23
1-15*	Bridges, Porto Rico (U. S. Poss.)	12- 7
1-15	Bridges, Huron, Ohio	12-28
1-25	Bridges, Osceola, Ark.	12-28
2- 5	Bridge, Cuadaloupe, Cal.	12- 7

Buildings.

Bids close.		Noted in issue of
12-29-30	Buildings, Hawaii, (U. S. Poss.)	11-30
1- 1	Hospital, Salem, Ohio	12- 7
1- 1	Court house, Jonesboro, Tenn.	12- 7
1- 1	School, Marietta, Ohio	12-21
1- 1	Church, Northwood, Iowa	12-21
1- 3	Almshouse, Crown Point, Ind.	12-21
1- 4	Hospital, Louisville, Ky.	11-23
1- 4	U. S. post-office Laporte, Ind.	11-30
1- 4	Court-house, Pasco, Wash.	12-21
1- 5	U. S. post-office, Maryville, Mo.	11-30
1- 6	U. S. post-office, Ellsworth, Me.	11-30
1- 9	Court house, Mattoon, Ill.	12- 7
1- 9	Jail, Lake Charles, La.	12-21
1-10	U. S. post-office, Gaffney, S. C.	12- 7
1-12	U. S. post-office, Mansfield, Ohio	12- 7
1-13	U. S. post-office, Bismarck, N. Dak.	12- 7
1-16	U. S. post-office, Frostburg, Md.	12-14
1-16	Courthouse, Forsythe, Mont.	12-21
1-29*	U. S. post-office, Santa Barbara, Cal.	12-21
2-20	U. S. post-office, Juneau, Alaska	12- 7

Water-Works.

Bids close.		Noted in issue of
12-29	Pump, Winnipeg, Man.	12-14
12-29	Water pipe, etc., Minneapolis, Minn.	12-21
12-29*	Pipe, Muskogee, Okla.	12-21
12-29	Water-works, Waterville, Kan.	12-28
12-30	Watermains, etc., Unadilla, Ga.	12-28
1- 3	Water meters, Kansas City, Mo.	12-28
1- 3	Valves, etc., New York	12-28
1- 5	Watermains, etc., New York	12-28
1- 8	Watermains, Euclid, Ohio	12- 7
1- 8	Canal, Turlock, Cal.	12-28
1-10*	Canal, Montrose, Colo.	12-21
1-10*	Cleaning pipe, Kansas City, Mo.	12-28
1-10	Hoists and derricks, Boise, Idaho.	12-28
1-12*	Standpipe, Erie, Pa.	12-21
1-15	Engine, pump, etc., Newberg, Ore.	12-21
1-15	W.-wks. materials, Kingfisher, Okla.	12-21
1-15	Franchise, Los Angeles, Cal.	12-28
1-16	Water-works, Albemarle, N. C.	12-28
1-22*	Pump, Dubuque, Iowa	12-14
1-25*	Boiler, Grand Rapids, Mich.	12-28
1-25	Pipe, Macon, Ga.	12-28
2- 1	Water supply work, Spain (Foreign)	12-28
2-15	Water-works, Twisp, Wash.	12-28
——	*Dam and pipe-line, Norfolk, Va.	12-28

Sewers.

Bids close.		Noted in issue of
12-28	Sewers, Newark, N. J.	12-28
12-28	Sewers, Cincinnati, Ohio	12-28
12-28	Sewers, Harrisburg, Pa.	12-28
12-29	Sewers, Boston, Mass.	12-28
12-29	Sewers, Cincinnati, Ohio	12-28
12-29	Sewer system, Kingstree, S. C.	12- 7
12-30	Sewer, White Plains, N. Y.	12-14
1- 1	Sewers, Vicksburg, Miss.	12-28
1- 2	Sewers, Waco, Tex.	12-21
1- 4	Sewers, Union Springs, Ala.	12-14
1- 4	Sewers, Youngstown, Ohio	12-28
1- 5	Sewers, Toledo, Ohio	12-28
1- 5	Sewers, Mobile, Ala.	12-28
1- 5	Sewers, Cameron, Mo.	12-28
1- 6	Sewer system, Fallon, Nev.	12-14
1-15	Sewers, New Philadelphia, Ohio	12-21
1-15	Sewage disposal plant, Springfield, Mo.	12- 7
3- 1	Sewers, Mattoon, Ill.	12- 7

Streets and Roads.

Bids close.		Noted in issue of
12-29	Wood block, Minneapolis, Minn.	12-21
12-29	Paving, Jacksonville, Fla.	12-14
1-20	Gravel roads, Terre Haute, Ind.	12-28
12-30	Street improvement, New York, N. Y.	12-28
1- 1	Road, Huntington, Ind.	12-14
1- 1	Road, Rensselaer, Ind.	12-21
1- 1	Gravel road, Newport, Ind.	12-21
1- 2	Highway, Winamac, Ind.	12-21
1- 2	Road, Paoli, Ind.	12-21
1- 2	Road, Brownstown, Ind.	12-21
1- 2	Highway, Lawrenceburg, Ind.	12-21
1- 2	Gravel road, Knox, Ind.	12-21
1- 2	Gravel road, Vincinnes, Ind.	12-14
1- 2	Macadam roads, Logansport, Ind.	12-14
1- 2	Roads, Fowler, Ind.	12-14
1- 2	Macadam road, Bloomfield, Ind.	12-14
1- 2	Culvert, Redwood City, Cal.	12-28
1- 3	Street impvt., New York	12-28
1- 3	Gravel road, Lafayette, Ind.	12-28
1- 3	Macadamized road, Greensburg, Ind.	12-21
1- 4	Road, Wilkesbarre, Pa.	12-21
1- 4	Grading Youngstown, Ohio.	12-28
1- 5*	Paving, Kenosna, Wis.	12-28
1- 5	Paving, Mobile, Ala.	12-28
1- 8	Road, Euclid, Ohio	12-28
1-15	Paving, Jersey City, N. J.	12-28
1-15*	Turnpike, Beachhaven, N. J.	12-28
1-15	Viaduct, Atlanta, Ga.	11-23
1-16	Paving, London, Ohio	12-21
1-17	Road, Cleveland, Ohio	12-28
1-18	Gravel road, Portland, Ind.	12-14
1-22	Paving, Montclair, N. J.	12-21
1-24	Street improvement, Carroll, Iowa	12-21
1-31	Gravel road, Bluffton, Ind.	12-28
2- 1	Impvts, Johnson City, Tenn.	12-21
3- 1	Paving, Rochelle, Ill.	11-23

Miscellaneous.

Bids close.		Noted in issue of
12-29	Ditch, Red Lake Falls, Minn.	12-14
12-29	Derricks and engines, Panama (U. S. Poss.)	12-28
12-30	Ditches, Memphis, Tenn.	12-14
12-30	Roof trusses, etc., Washington, D. C.	12-14
12-30*	Gate machines and pumps, Panama (U. S. Poss.)	11- 2
12-30*	Repairing jetty, Galveston, Tex.	12- 7
1- 2*	Dredging, Dallas, Tex.	12- 7
1- 3	Levee enlargement, Yuma, Ariz.	12-21
1- 3	Macadam plant, etc., Westmount, Que.	12-21
1- 3	Mechanical equip., San Francisco, Cal.	12-28
1- 3	Drain, Nevada, Iowa	12-28
1- 3	Metal furniture, Placerville, Cal.	12-28
1- 3	Drain, Clarion, Iowa	12-28
1- 4	Garbage disposal, Youngstown, Ohio (Garbage.	12-28
1- 4	Battleships, Wash., D. C.	11- 9
1- 4	Drainage work, Eldora, Ia.	12-14
1- 4	Temperature system, Bellingham, Wash.	12-14
1- 5	Street sweepings, New York, (Garbage)	12-28
1- 6	Material for rack railway, etc., Panama (U. S. Poss.)	12-14
1- 6	Ditch, Decatur, Ind.	12-28
1- 8	Boats, Wheeling, W. Va.	12-28
1- 8*	Dredging, Wash., D. C.	12-14
1- 8	Metal furniture, New York	12-28
1- 9	Steel rails, South Africa (Foreign)	12-28
1-10	Steamers, Bulgaria (Foreign)	12-28
1-10	Piles, Panama (U. S. Poss.)	12-21
1-10	Riprap, Memphis, Tenn.	12-21
1-11	Dredging, Bellingham, Wash.	12-21
1-11*	Subway, New York.	12-21
1-11	Rock excavation, Gloucester, Mass.	12-21
1-11	Pier, San Francisco, Cal.	12-14
1-13	*Steel barges, Cincinnati, O.	12-21
1-13	Compressed air mains, N. Y.	12-21
1-15	Breakwater, Bar Harbor, Me.	12-21
1-15*	Dredging, Portland, Me.	12-21
1-15*	Timber, Detroit, Mich.	12-14
1-15*	Lock gates, Detroit, Mich.	12-14
1-15	Timber, Sorel, Que.	12-28
1-17	Barge canal, Albany, N. Y.	12-28
1-19	Removing wreck, Jacksonville, Fla.	12-28
1-19	Monument, Little R'k, Ark.	12-14
1-20	Railroad grade, Poplar Bluff, Mo.	12-28
1-22*	Dredging, Boston, Mass.	12-28
1-22	Boat, Mobile, Ala.	12-28
1-24	Lock gates, New Orleans, La.	12-28
1-24	Steel rails, etc., Ottawa, Ont.	12-28
1-25	Excavation, Osceola, Ark.	12-28
1-27	Ditch, Elbow Lake, Minn.	12-21
1-28	Dock, breakwater, Portugal (Foreign)	12-28
1-30*	Snagging plant, Cincinnati, O.	12-28
1-30*	Dikes, Philadelphia, Pa.	12-21
1-31	Iron posts, Ottawa, Ont.	12-28
2- 1	Gunboats, Wash., D. C.	11-23
2- 6	Cranes, rails, Uruguay (Foreign	11- 2
2- 7*	Elevator, Oxford, N. Y.	12-21
2-29	Dredge, Portland, Ore.	12-28
3-10	Asphalt Paving, Chile (Foreign).	12-28
3-25	Ditch, Fremont, Ohio	12-28
4- 2	Breakwater, Egypt (Foreign)	12-28
4-23*	(1912) Harbor work, Chili	12- 7

Examinations.

Examination date		Noted in issue of
1-10	Surveyor. — Washington, D. C.	12-14
1-17	Topographic Draftsman, Washington, D. C.	12-21
1-17	Architectural and Structural Steel Draftsman, Washington, D. C.	12-21

the tideland area east of Whatcom Creek waterway, have been approved by the U. S. Government engineers.

Docks.—Portland, Ore.—Bonds for $2,500,000 for the construction of municipal docks have been authorized. G. B. Hegardt, Portland, is Engr., Dock Comn.

Dredge.—Portland, Ore.—Bids will be received until Feb. 29 by Maj. J. J. Morrow, Corps Engrs., U. S. A., Portland, for a steel-hull suction dredge for use in Coos Bay.

Engine House.—Los Angeles, Cal.—The Board of Public Works will ask for bids for the construction of a fire-engine house at Figueroa and Seventh Sts.

Metal Furniture.—Placerville, Cal.—Bids will be received until 2 p. m., Jan. 3, by the Eldorado County Board of Supervisors, Placerville, for the furnishing, delivering and installing of all metal furniture for the county court-house at Placerville. Plans and specifications and drawings may be seen and examined during office hours by intending bidders at the office of the Board; also at the office of T. C. Atwood, Clk. Bd.; also at the office of Cuff & Diggs, Archs., Theatre Diepenbrock Bldg., Sacramento, Cal.

Memorial Tower.—San Francisco, Cal.—The proposition to erect a memorial tower as presented by H. L. Pelton and P. E. Ferguson, First National Bank Bldg., San Francisco, has been endorsed by the Panama-Pacific Exposition. The base is to be 232 ft. square and 120 ft. high. From this base will rise a shaft 85 ft. square and 730 ft. high, making the total height of the structure 850 ft. The tower will be of steel construction and the exterior of terra cotta or marble.

Cement.—San Francisco, Cal.—The Board of State Harbor Commissioners will soon award the contract for 150,000 bbls. of cement for pier construction.

✚Steel Reinforcement.—San Francisco, Cal.—Macdonald & Applegarth, Archs., Call Bldg., San Francisco, have awarded the contract to the TRUSSED CONCRETE STEEL CO., 333 Kearny St., San Francisco, for furnishing and setting steel reinforcement for the Moor-Watson Building on North Market St. Estimated cost, $18,000.

Mechanical Equipment.—San Francisco, Cal.—Bids will be received until 2 p. m., Jan. 3, by the Board of Public Works for furnishing and installing the mechanical equipment in a Class "A" building to be located in Fort Mason Military Reservation, for the auxiliary water-supply system for fire protection. J. L. McCormick is Secy. Bd.

Timber.—Sorel, Que.—Bids will be received until noon, Jan. 15, by Alexander Johnston, Deputy Minister of Marine and Fisheries, Ottawa, Ont., for supplying 40,000 cu. ft. of round white pine timber and 10,000 cu. ft. of round yellow spruce in the log, delivered at Sorel not later than July 31, 1912.

Steel Rails, etc.—Ottawa, Ont.—Bids will be received until noon, Jan. 24, by P. E. Ryan, Secy. Comrs., Transcontinental Ry., Ottawa, for about 14,468 gross tons of 80-lb. steel rails and the necessary rail fastenings. Gordon Grant, Ottawa, is Ch. Engr.

U. S. POSSESSIONS AND CUBA.

Automatic Signal Material.—Panama.—Bids will be asked soon by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., for furnishing automatic signal material for the Panama R. R.

Derricks and Engines.—Panama.—Bids will be received until 2 p. m., Dec. 29, by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., for furnishing four stiff-leg derricks and two hoisting engines.

✚Snubbing Posts.—Panama. — The contract has been awarded by the Isthmian Canal Commission, Washington, D. C., to the RAILWAY STEEL SPRING CO., 30 Church St., for Class 3, Circular 656, at $13,572. The contract requires the furnishing of 25,608 helical springs. List of bidders noted Nov. 16.

✚Lumber.—Panama.—Contracts have been awarded as follows by the Isthmian Canal Commission, Washington, D. C., for supplies under Circular 665-C: To the THOMAS E. COALE LUMBER CO., Franklin Bank Bldg., Philadelphia, Pa., for 1,700 40-ft. and 100 50-ft. untreated piles, at $12,410; to WILLIAM R. GRACE & CO., San Francisco, Cal., for 800 M. ft. B. M. Douglas fir and yellow pine lumber of various sizes, at $23.80 per M. ft. List of bidders noted Dec. 21.

Buildings for Quarantine Station.—Porto Rico.—Bids were received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until Dec. 5, for the construction, complete, of the buildings for the U. S. Quarantine Station at San Juan, P. R., consisting of five 1-story buildings, having a total ground area of 14,260 sq. ft., with reinforced-concrete walls and floors and tile and tin roof covering. All bids were rejected, being in excess of the amount available. List of bidders noted Dec. 14.

FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ——, ——. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

Watermains.—Austria-Hungary.—The city of Eger, Hungary, is planning to lay watermains, to cost about $160,000.

Generating Station.—New Zealand.—The Town Board of Franklin has decided to install an electric generating station. Estimated cost, about $35,000.

Asphalt Paving.—Chile.—Bids will be received until 10 a. m., March 10, by the city of Santiago for laying 70,000 sq. meters of asphalt paving. Noted July 27.

Steam Railway.—Italy.—The Societa Anonima della Tramvia Milano-Magenta-Castana has been granted a concession for the construction of another section of the steam tramway near Castano Primo.

Water Supply Work.—Spain.—Bids will be received until noon, Feb. 1, by the Secretaria del Excmo, Ayuntamiento, Bilbao, for the filtration and sterilization of the water-supply of Bilbao.

✚Steamer. — The Netherlands.—The Holland-America Line has awarded a contract to HARLAND & WOLFF, Belfast, Scotland, for constructing a 32,500-ton passenger steamer for the New York service.

Breakwater. — Egypt.—Bids will be received until April 2 by the President of the Municipal Commission, Alexandria, for the construction of the Kaid Bey branch of the East Port Breakwater at Alexandria.

Steamer.—Bulgaria.—Bids will be received until 3 p. m., Jan. 10, by the Societe Commerciale Bulgare de Navigation a Vapeur, Varna, for furnishing a steamer of 18,000 tons, with accommodations for passengers, cattle and cargo.

Steel Rails, Etc.—South Africa.—Bids will be received until noon, Jan. 9, by the Secretary to the Tender Board of the South African Rys. Administration, Johannesburg, for 4,708 tons of steel rails, 300 tons of fish-plates and 714 tons of chair-plates. Bids are asked alternatively f. o. b. British ports or c. i. f. South African ports.

Dock, Breakwater. — Portugal.—Bids will be received until Jan. 28 at the offices of the Conselho de Administracao do Porto de Lisboa, Lisbon, for harbor works, consisting of improvements to the Alcantara dock and the construction of a breakwater west of the Santos dock. Plans and specifications are on file at Lisbon.

TRADE PUBLICATIONS.

LEAD WOOL.—United Lead Co., 111 Broadway, New York City. Paper; 9 × 6 ins.; pp. 15; illustrated.

The advantages of lead wool for calking water and gas mains and various other pipe joints as compared with the use of molten lead for this purpose are set forth in this catalog. A table showing the approximate quantities of lead wool and yarn required for various diameters of pipe from 2 to 42 ins., under pressure as high as 500 lbs., is given.

GARBAGE INCINERATORS. — Nashville Bridge Co., Nashville, Tenn. Catalog; paper; 8 × 9 ins.; pp. 12; illustrated.

A newly patented garbage incinerator designed to utilize the heat of combustion is described. The patents have been secured by Dr. J. B. Harris, Nashville, Tenn., who has arranged with the Nashville Bridge Co. to act as contracting engineers and builders for the Southern States. We have ascertained by special inquiry that no furnaces of this type have yet been built.

INFORMATION FOR WATER-WORKS MEN.—Neptune Meter Co., 90 West St., New York City. Leather; 3 × 6 ins.; pp. not given.

A variety of tables and other useful information for water-works engineers and superintendents is included in this volume and is followed by a diary for the year. Some of the tables give information in considerable detail, which will be of particular use in connection with the setting of meters, and the maps of the United States and other parts of the world, and the world as a whole, are included.

ELECTRIC FUSES.—General Electric Co., Schenectady, N. Y. Bulletin 4899. Paper; 8½ × 10 ins.

Fuses for use on circuits of voltages up to and including 110,000 volts are here described. Open fuses are seldom used in such places on account of the arcs that are liable to follow. In the type described, the fuse is blown in a non-conducting tube of suitable dimensions. It gives the property of quickly opening the circuit and projecting the arc from one end of the tube. It is claimed that the line current is opened at approximately the zero point of the wave and that no surging takes place on the line.

BALOJTICONS AND ACCESSORIES.—Bausch & Lomb Optical Co., Rochester, N. Y. Paper; 7 × 9¾ ins.; pp. 66; illustrated.

Although engineers are likely to be interested in optical projection only indirectly as occasional lectures, this book contains so much that is difficult to find elsewhere that we take pleasure in calling our readers' attention to it. The whole subject of lantern-slide projection will be found covered in a most satisfactory way, both as to theory and practice. The printing and illustrations are excellent, and every engineer who has occasion to use such a machine, as many do in talks before engineering societies and clubs, will find this booklet both interesting and instructive.

MULTI-DIFFERENTIAL ARCH DAM.—Multiple Arch Hydraulic Construction Co., Ltd., Engineers, Spartanburg, S. C. 6 × 9 ins.; pp. 25.

This unique little pamphlet opens with the following "elegy" upon the gravity type of masonry dam:

The "Solid" Dam.

Created by a lavish hand
And fostered from your birth,
You've thriven well in every land
And lauded for your worth.

'Tis truly a disgrace to think
How you have fooled us all,
Your prestige was a money sink
And we have been the thrall.

But thanks to scientific search,
Your day is done at last;
You'll take-the-count from all of us
And sink into the past.

The dam described in the pamphlet is made up of a series of small masonry arches, supporting a comparatively thin inclined wall. The construction is, in fact, similar to the now well known Ambursen type of hollow dam, except that instead of having rectangular cells and using reinforced concrete to take the bending stress on the back of each cell, the multiple arch construction substitutes an arch cell in which the masonry is all in compression and no reinforcement is needed. This type of dam was patented by Mr. George E. Ladshaw in 1908, U. S. Patent No. 828752. A dam of this type was completed on the King River, Cal., in 1908, which is 61 ft. high and 677 ft. long. It is stated that several other dams of this type are to be built on the Pacific Coast.

ELECTRIC GENERATING APPARATUS.—General Electric Co., Schenectady, N. Y. Miscellaneous Bulletins; paper; 8 × 10½ ins.

A popular exposition of the Curtis type of steam turbine has been written for Bulletin 4883. The general principles of design and features of construction of the turbine and of the driven generator are found. Following the text are numerous full-page illustrations of typical installations of the several types of vertical and horizontal Curtis units.

In Bulletin 4860 is a popular review of the elements of electro-metallurgy. This is made as an introduction to the descritpion of designs of generators particularly adapted for the heavy currents and low voltages required in this work. The machines range in size from 1½ to 15 KW.

This company has developed a large number of motor-generator sets for converting alternating current to direct, and the general line of apparatus is described in Bulletin 4849. The sets are made up of various combinations of separate motors and generators, and range in capacity from 95 to 7,000 KW.

What are known as "synchronous condensers" are described in Bulletin 4859. These are essentialily synchronous motors of light construction intended to float on alternating-current lines to improve the power factor. This they do by virtue of being superexcited synchronous motors drawing a current which "leads" the voltage. They may be used as synchronous motors if the load does not approach the rated capacity, which is undesirable on account of the light construction. The bulletin also contains a brief exposition of the theory and economics of improving power factor with such machines.

In Bulletin 4868 are illustrated and described rotary converters for railway and lighting service in capacities ranging from 25 to 2,500-KW. These serve somewhat the same purpose as the motor-generator sets mentioned above, but the functions of both machines are concentrated in a single one. They are essentially synchronous motors with a commutator connected to the rotor windings for drawing off direct current. They are less flexible than the motor-generators noted in that the ratio of alternating current to direct current has not the wide range of the other machines.

For other Proposal Advertisements see pages

53, 54, 56, 57

of Advertisements and Construction News, page 286

DAM AND PIPE LINE.

Norfolk, Va.

Bids are requested for:

First: Hauling about 400 tons of 24" wood pipe and about 1600 tons of 16" cast iron pipe.

Second: Laying about 24,400' 24" wood pipe and about 28,500' 16" cast iron pipe.

Third: Constructing earth dam on North Landing River.

Location: From seven to twelve miles east of Norfolk, Virginia.

Copies of drawings and specifications may be obtained by making application to the undersigned by depositing certified check for $5.00 for each set of plans and specifications.

AMERICAN PIPE & CONSTRUCTION COMPANY,
A. H. KNEEN,
Asst. Genl. Supt.
Operating Dept.

LONG BEACH TURNPIKE.

Beachhaven, N. J.

Bids will be received until noon Jan. 15th, 1912, for the construction of 5 trestle bridges, total length 6415 feet; and for 3490 lineal feet of sand fill between sod walls, between Manahawken, N. J., and Long Beach.

Plans and specifications for this work may be obtained from the Engineer, WM. H. FORD, Arcade Building, Philadelphia, Pa.

Agencies or Bureaus

AMERICAN SERVICE CO.
Pittsburgh, Pa.

Require for specification openings

Ass't Professor in Architectural Engineering Univ., Sal., $1200. Arch. Eng. Dfts. Interior and Elev. design details and Estimates, $1500-$2000. Ass't Professor Civil Engineering, Railway Curves-Trig., $1200. Hydro-electric designing draftsmen, $150-$250. Central Station detail Mechanical draftsmen, $125. Buenos Aires, $200. Structural Checkers (3), $100-$150. Structural Tracers, $65-$90. Mechanical Tracers, $60-$100. Spec. Mch. Dfts., $150. Surveyors, Land, Janeiro, Buenos Aires, also Electricians, Chemical Plant, Mechanical designers. S. A.: Wash. Chief Electrician on Transmission Lines and Switchboard, Hydro-Elect. Plant; Ry. Signal Dept. Mexico. Instrumentmen for development in N. C., Tenn., Ga., Okla. Also Rodmen and Stakemen wanted, $50 and expenses. 26-1t

For Sale

FOR SALE.

2 yd. Clam Shell Bucket

Nearly New—$300.
1¼-yd. Dipper Marion Dredge.
38-Ton Traction Steam Shovel
70-Ton Bucyrus Steam Shovel.
Model 60 Marion.
20-Ton 3-Wheel, Loco. Crane.
FRED. A. PECKHAM,
McCormick Bldg., Chicago.

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